

# Aviation News

MCGRAW-HILL PUBLISHING COMPANY, INC.

OCT. 8, 1945



**Navy's New Grumman F8F Bearcat:** Combining light weight and high maneuverability, which characterized Jap planes, this rugged fighter is reported as the fastest conventionally powered airplane. Speed is more than 400-mph. at sea level, much faster at critical altitude. Its climb is better than 5,000-ft. per minute; power is from a Pratt & Whitney 2800C driving a four-blade Aeroprop propeller. Delivered too late for combat, the Bearcat saw operational duty in the Pacific.

## Surplus Disposal Reorganized With Symington Control

Wholesale quickening of procedures seen with veteran businessman at head of newly created administration.....Page 7

## Extra Airports Necessity At All Major Air Terminals

Industry, CAA officials assert rising proportion of instrument approaches will force nationwide addition of new "bad weather" fields.....Page 39

## Potential Lightplane Sale Bar Seen In Financing

Federal Reserve regulation prohibits use of trade-in allowance toward down payment on planes but allows it for automobiles.....Page 31

## Guided Missile Supervision Swings Toward AAF, BuAer

Aircraft industry share in production of airborne weapons seen largely dependent upon final determination of jurisdiction.....Page 10

## Railway Express Adjustments Asked By Airlines

Group believes air carriers have been deprived of sizeable revenue through Agency's power to enforce and interpret contract terms.....Page 18

## Seven U. S. Lines Get C-54's As Surplus Agency Allocates 40

Record domestic apportionment of the big transports sends dozen to PCA while Netherlands government gets 14.....Page 42

# IMMEDIATE Smoke Detection

For airplane baggage compartments

## TYPICAL INSTALLATION

- 1 SMOKE ANYWHERE IN BAGGAGE COMPARTMENT is pulled into duct (by suction of airflows)

- 2 SMOKE INTERCEPTS LIGHT from source in control housing

③

PHOTOELECTRIC CELL  
IN DETECTOR UNIT  
responds to light  
intensity change

④

DETECTS SMOKE  
OF ANY TYPE  
OR COLOR

⑤

MIRROR ARRANGEMENT  
minimizes interference  
in exhaust  
duct

⑥ FULLY COMPENSATED FOR  
LIGHT OUTPUT CHANGES—  
Second cell in control  
housing keeps circuit  
balanced if voltage drops

⑦ QUICK CHECK TEST  
of equipment by  
manually operated  
shutter

⑧ SET FOR ANY SENSITIVITY—  
by adjusting  
length of light path

⑨ ALARM CAN BE VISUAL, AUDIBLE  
OR BOTH

This sure, fast-acting system quickly warns plane crew of smoke in cargo compartment—detects fire in its initial stages! Write for bulletin giving further details.

Walter Kidde & Company, Inc., 1020 Main Street, Belleville 6, New Jersey

Kidde



The word "Kidde" and the Kidde seal are trade marks of Walter Kidde & Company, Inc.

THE AVIATION NEWS

# Washington Observer



STILL "SECURITY"—The end of the war did not end the Army's desire to control public information. In line with other dispensing indications that the military would like to continue some phases of censorship is the fact that the AAF is reported seeking legislation, broad authority for the Secretary to tell already manufacturers what they shall or shall not make public.

\* \* \*

PLANT DESPERSAL—Army Air Forces at the moment appears to be modifying its insistence on wide-spread production subcontracting as a method of achieving aircraft plant dispersal. Tend now is toward keeping procurement legislation and policies elastic enough to make possible a switch from peacetime to war production without having to wait for a declaration of war, passage of a war powers act, etc. AAF will still, however, emphasize the desirability of subcontracting.

\* \* \*

CAA-CAB REORGANIZATION—Information as to Presidential plan for reorganization of the Civil Aeronautics Authority, if any, has not yet been relayed to key members of Congress. However, Senator Pat McCarran's Judiciary Committee is readying a bill authorizing government reorganization which the Senator indicates he hopes Mr. Truman will sign to establish the Authority as an independent agency. Under the proposed bill, the President could transfer CAA-CAB to the Interstate Commerce Commission. During the 1940 Congressional fight over placing them under the Department of Commerce, Mr. Truman, then a senator, supported an independent Authority.

\* \* \*

NACA DECLASSIFICATION—National Advisory

Committee for Aeronautics, one of the war's most right-hipped agencies, is now beginning to talk. More than 350 NACA technical reports and notes written since wartime security classification restricted them from general availability, recently have been declassified. In general they cover research in aerodynamics, aircraft structures, aircraft power plants and aircraft operating problems of a scientific nature. These publications will be made available throughout the aviation industry to technical libraries and educational institutions.

\* \* \*

"UN-CAMOUFLAGE"—Complaints are reaching the Army from aircraft companies on the question of "un-camouflaging" planes. The Army made contracts with various planes whereby they were to shoulder the expense of camouflaging when there was fear of enemy air raids. Contracts specified that the Army, also, was to bear the expense of restoring the planes to the original condition. Now, several manufacturers are complaining the Army is backing out, pleading lack of funds for removing paint, eliminating windows and sky-light blockouts. Manufacturers, stoutly feel that they have been left out on a limb.

\* \* \*

NAVY SCRAP—The Navy's ambitious program to provide a heavy torpedo bomber, TBF "Savvyl," for the carrier force, is being concluded with sale of TBF fuselages to a kitchen utensil manufacturer for conversion into pots and pans. Not a single TBF got to the fleet, the contract having been terminated well in advance of the end of the war. Sale of the fuselages as scrap for kitchenware virtually completes disposition of scrap from the huge Alameda, Pa., plant of Consolidated Vultee.



First post-war E-173s, completed last week



## AVIATION NEWS

### THE STAFF

George W. PUGH	Publisher
ROBERT H. WOOD	Editor
C. SCOTT MURRAY	Managing Editor
MERLIN H. MCQUEL	Associate Editor
RAYMOND COOPER	Transport
MARY FAUCILLE PEET	War Aircraft
WILLIAM KASPER	Aircraft Accidents
ELIAS STURGEON	Special Assignments
MARTIN V. MORSEY	New York Editor
SCHUYLER BROWN	Pacific Coast Editor
ALLEN MCNEILSON	Private Flying Editor
KARL HORN	Copy Editor
DANIEL MAGLIARDI	Art Director
ROBERT W. MARTIN	Sales Manager

### CONTENTS

Washington Observer	5
Industry Observer	5
Naval News Service	6
Financial	10
Personnel	11
Reduced	11
Ad Rates	12
Flight Training	12
Transport	12
Printers	12
	45

### THE PHOTOS

Staff Photo by Ted Adams, 3-34, Indianapolis  
Press Photo, 1-21, General Electric Co.  
Press Photo, 2-21, Indianapolis Journal  
Copy 212 to U.S. Army Air Forces, 58-45.

Editorial Headquarters  
1111 Pennsylvania Avenue, Washington,  
D.C. 20546  
Postmaster: Please send address changes  
to Post Office, 300 N. Michigan Ave.,  
Chicago 1, Illinois  
Pacific Coast Office, 621 S. Hope St., Los Angeles  
Midwest Office, 100 N. LaSalle St., Chicago 1, Illinois  
Southwestern Office, 100 N. Main St., Fort Worth, Texas  
Northeast Office, 100 N. Main St., New Haven, Conn.  
International Office, 100 N. Main St., New Haven, Conn.  
Subscription Department, 1111 Pennsylvania Avenue, Washington,  
D.C. 20546  
Single copy, 25¢; 12 issues, \$2.50  
Second-class postage paid at Indianapolis, Indiana, and at additional mailing offices.

Volume 4, Number 11

### Advertisers Index

Acme Aerotow Corp.	50
Air Accidents Inc.	50
Bell Aircraft Corp.	50
Commercial Diamond Welding Co.	50
General Electric Co.	50
Hillman Glass Co.	45
Hoover Co. Inc.	45
John Deere Co.	50
Leland Shuster Co.	50
McDonnell Aircraft Corp.	50
McDonnell Douglas Corp.	50
McDonnell Corp.	50
Missouri Aluminum Corp.	50
Monogram Industries Inc.	50
North American Aviation Inc.	50
Permo-Flux Corp.	50
Shaw Aeronautics Corp.	50
Stearman Aircraft Co.	50
Stearman Flying School	50
The Boeing Co.	50
Wright Aeronautical Corp.	50
Wright-Patterson Air Force Base	50
Wright-Patterson Air Force Base	50
Wright Manufacturing Co.	50

## Permoflux Speakers and Transformers Set New Standards of Comparison!

New Permoflux speakers in a complete range of true-dimensioned sizes from 3" to 15", with power handling capacities from 1 to 30 watts, provide the finest sound reproduction for every application.

Permoflux midget transformers, with their many practical circuit applications, have literally revolutionized efficiency concepts where size and weight are determining factors.

Advanced engineering designs, improved manufacturing methods and new materials have all contributed their share in the development of Permoflux speakers, transformers, microphones and headphones. You can count on Permoflux to provide an exceptionally fast and accurate response.

**BUY WAR BONDS FOR VICTORY!**

TYPE MAKE  
**PERMOFLUX**  
PERMOFLUX CORPORATION  
4900 WEST GRAND AVE., CHICAGO 39, ILL.



PIONEER MANUFACTURERS OF PERMANENT MAGNET ELECTRIC TRANSFORMERS

## News at Deadline

### To Survey Reconstruction

Aircraft reconstruction problems and policies will be surveyed by the aviation subcommittee of the Senate's Mindel Investigation Committee at hearings this week, with leading East Coast aircraft manufacturers as witnesses. Lawrence D. Bell, Bell Aircraft, Rex Bensel, United Aircraft, C. W. Vaughan, Curtiss-Wright, LeRoy Greenman, Geremann Aircraft, Glenn L. Martin, The Glenn L. Martin Co.; Alfred Marchese, Republic Aviation, and J. Carlisle Ward, Jr., Fairchild, have been invited to testify. While reconstruction will be emphasized, attention also will be given to government procurement policies and aircraft research and development.

### Basic Naval Policy Set

While the size and nature of the Navy's postwar air arm is being threshed out between the admirals and members of the Naval Affairs and Appropriations committees in closed sessions, the basic post-war naval aviation is reported as having been set authoritatively to be, in effect, L. Production of new aircraft has been suspended but post-war naval aviation will be shown as a major element in the national plan. A. Attention is concentrated on postwar factors. A. Production of new and improved types gets first emphasis. E. Existing types to be produced only so long as it is necessary to supply the post-war Navy until new types are available. E. Post-war manufacturing rates for new models limited to that required to replace older types based on attrition and obsolescence and not on the basis of complete replacement as soon as possible.

### UAL Seeks New Route

The proposed merger of Mid-Continent and American Airlines drew fire last week from United Air Lines, which announced it would apply to Civil Aeronautics Board at once for routes to Rockford-Milwaukee-St. Paul, Kansas City and St. Louis to its own transcontinental route. The move is necessary, UAL said, to offset the threatened loss of its connections with Mid-Continent for traffic from these cities.

## Industry Observer



► AAC has placed an order with Northrop for a photo reconnaissance version of the Black Widower which will offer marked performance improvements. Full production is anticipated by February. Meanwhile, AAC is losing interest in Howard Hughes' F-11 photo plane.

► Peak delivery of Fairchild's C-42 will be 8 monthly instead of 12 apparently scheduled, although AAC at present expects C-42 work to continue until November 1947.

► With termination of production contracts at General Electric, Allison remains the only AAC producer of jet engines, turning out GE-designed arm for Lockheed P-80s.

► To eliminate conversions, the Navy is taking aircraft contractors to deliver complete ready-for-the-fleet planes now that pressure of wartime schedules is off. Navy conversion units will remain functioning only temporarily.

► Although no official report is yet completed, evidence indicates that the pilot brought down the Eastern seaplane which crashed recently in the South east because of fire started in the rear of the cabin and spread forward. Potentially dangerous contents of passenger hand baggage and coats, especially belongings of returning GIs from battle areas, has caused some discussion among airline officials.

► Southern Aircraft, Dallas, is modifying a twin-engined executive transport, Model 11, to sell at rates of \$25,000, with cruising range of about 900 miles. Company's smaller plane of revolutionary design probably will be an equal success. The firm will start a line of non-airline products, including light-weight metal kitchen equipment.

► Prototype of the postwar version of the Beech twin-engined Model D-105 will be flying very day now. It is hoped production will reach one a day this fall. The company indicates orders of almost 300 for this popular executive and family transport, accommodating 4, 5, or 6 passengers. Unit cost will be about \$60,000. Production of the D-105, single-engined plane, will be re-commenced on a limited scale, with the 150-hp Pratt & Whitney engine.

► The decision which North American officials reach on whether to use its General Motors' new 200-hp liquid-cooled engine in the projected North American 4-engine transoceanic airplane will play a major role in any production plans for the new power plant. From the standpoint of GM, which has a large majority holding in North American, the new plane would be an excellent medium to introduce the engine. Low cost per horsepower, estimated by one company engineer at \$4 in quantity output, is another argument for marketing.

► Coast & Gosselin Service has dispatched 3 groups to survey locations and length of airfields within 3 miles of every airport to be used to meet the 4-engine airliner operating under the transport category requirements. The airlines, however, have asked CAA to arrange for additional survey parties as soon as possible.

► Rohr Aircraft Co., near San Diego, may enter the personal aircraft market with a 4-place model now in design. The company recently merged with International Detroit. The merger was begun after consideration of a variety of aircraft design proposals including both conventional and powered gliders. ► Hawker-Siddley Aircraft (British) plans to use its recently purchased Victory Aircraft Ltd. factory at Toronto to make aircraft and new types of turbine power plants, which would be marketed in North America and for export. The parent company is sending a team of engineers to Canada.

► The factory of Boeing Aircraft of Canada Ltd. at Sea Island, Vancouver, has been turned over to War Assets Corp. as surplus. Employment, once 10,200, is less than 1,000.

► Canadian Car & Foundry is closing down its Holloman line. It has been producing about 30 SHV's (Canadian Car designation) a month.

## SPEED STRESSED

## Surplus Disposal Reorganized As Symington Assumes Control

Wholesale quickening of procedures seen with veteran businessmen at head of newly created administration; directives expected to emphasize elimination of industry "perils," movement of items this year.

A wholesale speeding up of surplus property disposal, with new and definite directives issued by disposal agencies, is seen in the offing following the swearing in last week of W. Stuart Symington, St. Louis, Mo., businessman, as sole administrator of surplus property.

Although Symington's greatest job and, consequently, perhaps greatest interest will be in consumer goods, first effects of the sweeping reorganization which created the Surplus Property Administration could be felt in the aviation field.

Although Symington's greatest job and, consequently, perhaps greatest interest will be in consumer goods, first effects of the sweeping reorganization which created the Surplus Property Administration could be felt in the aviation field.

► Aircraft—Types suitable for civilian use must be moved at best possible terms, but sales are paramount; combat types should be scrapped, wholesale if necessary, without too much concern for salvaging.

► Engines and parts—Relatively little can be sold for aviation use; speedy determination must be made of other possible markets, followed by salvaging and scrapping if necessary; engine surplus must not be permitted to impede normal trade.

► Parts—Low rigid rate and lease terms; better treatment of wartime leases.

► Tools—Retention of present pro-

cedures much as they are; no tools seem to be moving satisfactorily; quicker removal of tools not desired by plant operators.

Overhanging practically all of Symington's utterances on the surplus problem is one compelling desire among—movement of the majority of items during the business recovery period, when he seems to feel will be drawing to a close about the end of the year.

Along with this is his expressed belief that disposal of surplus plants can be a substantial aid to reconstruction. He does not fully approve of the terms being offered to date by the Reconstruction Finance Corp., disposal agency for plants. Former head of the Kaiser Steel Co., Symington knows the plant situation first-hand. His organization operated in two government-built plants, but could not agree to RFC's original terms for continued use of the facilities.

► Base Aid—More lenient arrangements for purchases, and greater speed, are expected to facilitate orders Symington shortly will send to disposal agencies.

With express authority over surplus disposal, Symington will move toward making the present set more effective, rather than to



**Sikorsky First**

— IN PRODUCTION — IN THE SERVICES

Sikorsky helicopters, first to roll off a helicopter production line, were the only ones to see active military service. In addition to training hundreds of pilots in the U.S.A.A.F., the Coast Guard, the U. S. Navy, the I.T.A.F. and the Royal Navy, Sikorsky helicopters were in action in England, Alaska, China, Burma, India, the Philippines and on Army flying repair bases in the Southwest Pacific.

**SIKORSKY AIRCRAFT**  
Bridgeport, Connecticut  
ONE OF THE FOUR DIVISIONS OF UNITED AIRCRAFT CORPORATION

## PART OF AAF OCCUPATION FORCE:

This armful of Boeing Flying Fortresses, lined up on an air field in Germany, is part of the U. S. occupa-

tion air force. These planes, about 230, were flown from England to do aerial duty.



## NACA INDUSTRY CONSULTING COMMITTEE

First meeting of the Industry Consulting Committee, established by the National Advisory Committee for Aeronautics (Aviation News, Sept. 24), named J. H. Kindelberger, president of North American Aviation, chairman, and R. M. Harmer, president of United Aircraft, vice-chairman. Around table, members are, left to right: Beverly Hauser, Hawthorne School of Aeronautics; Vennerus Duk, NACA; William A. M. Burden, assistant secretary of commerce; L. A. Bell, president, Bell Aircraft; William Littlewood, American Airlines; General L. E. Richardson, NACA; Dr. George W. Lewis, NACA; Theodore P. Wright, Civil Aeronautics Administrator; Gen. S. W. Chaffee, AFAC; Kindelberger; C. Sestell Moore, president, PCA; Robert E. Gross, president, Lockheed; Jack Fife, president, TWA; Horner, and W. T. Piper, president, Piper Aircraft. Seated behind, T. L. K. Small, NACA, engineering secretary of the committee; E. R. Sharp, NACA; Col. D. M. Putt, AAP; Capt. Robert S. Fletcher, Bureau of Aeronautics; Grover Loesing, NACA; John F. Victory, NACA; and Paul H. Kenner, AAP.

ask Congress for amendment. He believes time is so short for maximum disposal that the best plan is to continue utilization of disposal agencies, with their trained staffs, rather than seek Congressional action for an independent agency.

While not desirous of any immediate changes in the law, Symington has already moved decisively to shake-up the existing system. Five administrative branches have been set up. They are:

- Capital and producer goods — under which come all aviation supplies — headed by David H. O'Brien, who has been in charge of aircraft, consumer goods, headed by Merrill C. Penfield; operations, headed by Col. G. E. Mansur; economic research, headed by Dr. Raymond T. Stevens; public information, headed by Lt. Col. John M. Redding. The latter post assumes greater importance than previously held by a director of information, with Col. Redding on a policy-making level.

Another key point in Symington's program is simplifying the process of procurement by these changes. This will be in charge of a new deputy administrator, James C. Whalen.

Initial result on aviation of SPA's reorganization likely will be the matter of reorganizing APC, but broad authority to proceed in this respect, but has been delayed by operational problems, chiefly, and according to some sources, by lack of funds. SPA is expected to move

on both fronts: starting in the fall when it will seek and have, and, if necessary, asking funds from Congress to reconstitute APC for scrapping expenses.

**Risks vs. Benefits.** Some top officials of APC are represented as being wary of scrapping, fearful of its political aspects. SPA executives, on the other hand, are willing to risk Congressional disapproval in carrying out of their plans.

## Pilot, Aircraft Listings To Be Resumed

Publication, sale and distribution of amateur aircraft catalogues — headed by David H. O'Brien, who has been in charge of aircraft, consumer goods, headed by Merrill C. Penfield; operations, headed by Col. G. E. Mansur; economic research, headed by Dr. Raymond T. Stevens; public information, headed by Lt. Col. John M. Redding. The latter post assumes greater importance than previously held by a director of information, with Col. Redding on a policy-making level.

Formerly issued by the old Aerostatic Chamber of Commerce, the lists were put up for bid recently by the CAA, with Huddaway Reed Publishing Co. of Dallas, Tex., offering the low sum of \$10,000.

**Pricing Plan.** Two series will be issued. About 30,000 certified aircraft will be listed by types and owners, with monthly supplements thereafter. The first pilot list will include about 300,000 names, by states, with subsequent supplements monthly. A student pilot list will be prepared later.

General Shadley, president of the partners of the new company, is editor of Southern Flight magazine. Robert B. Reed, of San Angelo, Tex., is publisher.

## Aviation Clinic Unit Shaping Programs

A committee under the chairmanship of John E. P. Morgan, executive director of the Aircraft Industries Association, is working on a program for the National Aviation Clinic to be held at Oklahoma City, Okla., Nov. 19-21, and which will be opened by President Truman.

Invitations have been sent to each of the United Nations to request participation in the observances. Voting delegates will be invited to 60, half of whom will represent the various divisions of the aviation industry, and half the public. The public generally, federal and state officials and others may attend the Clinic as consultants and observers and participate in its activities.

**Sesame Leader.** William B. Bryant, president of the National Aerospace Association, will preside at general sessions of the Clinic, all of which will be held in the Oklahoma House of Representatives chamber.

President Truman, in accepting the invitation to address the opening session of the third annual Clinic, commented that "in the global war which ended with the unconditional surrender of our enemies, the war came into its own. It was born of the complexities in the six years that lay between the beginning of the war and the collapse and capitulation of Japan. We are looking

now to the future—a future of peace during which aviation will achieve its greatest development and expansion and play a role of incalculable importance."

Stanley C. Draper, head of the Clinic Executive Committee announced the following committee:

- **Resolutions.** Dudley H. Doré, Hale & Doré, Boston attorneys, chairman; Glen B. Eastburn, manager, Aviation Department, Los Angeles Chamber of Commerce, vice-chairman.

- **Program.** John E. P. Morgan, Aircraft Industries Association, chairman; William P. Redding, National Aerospace Association, vice-chairman.

- **Creditors.** James R. Grabiner, United States Aviation Underwriters, New York, chairman; William P. MacCracken, general counsel, National Aerospace Association, vice-chairman.

- **Public Relations.** Merrill C. Meigs, vice-president, Hearst Corp., chairman; Edgar T. Bell, secretary-treasurer, Oklahoma Publishing Co., Oklahoma City, vice-chairman. The public relations activities will be divided into three divisions including newspaper, James Strobridge, editor, Associated Press, radio, Leander C. Reisch, station



## BRITISH AUTO TRANSPORT

Most of one possible prospective use for some of Britain's larger converted lorries or new transport models, came last week with this picture, reproduced from the English publication *The Aeroplane*. Shown are three Austin automobiles being loaded onto an Avro York. According to the car manufacturer, in conjunction with the plane builder A. V. Roe Co., use of the big bombers as a means of shipping small cars to South Africa and other overseas points is now being investigated with an eye to extensive operation as soon as equipment becomes available. The load of three Austin, it is claimed, can be loaded and ready for flight within a half hour and delivered without dismantling.

W.B. Atchison, and publications, the Ole Peabody Fund, Tree Magazine.

## Rolls Royce Enters Canadian Market

### 'Wing' Bomber

America's first flying wing bomber, Northrop Aircraft Inc.'s XB-35, is scheduled for test flights on or soon after.

The flight will be made at Northrop Field, Hawthorne, Calif., where the plane has been under construction since last year. An Army inspection board is expected to arrive at the factory from Northrop Field on that date to view the tests. Test flights are expected to begin at that time and, if successful, a flight will be submitted to the Air Force.

The flight will be made at Northrop Field, Hawthorne, Calif., where the plane has been under construction since last year. An Army inspection board is expected to arrive at the factory from Northrop Field on that date to view the tests. Test flights are expected to begin at that time and, if successful, a flight will be submitted to the Air Force.

**Flying Problem.** Selection of a test pilot for the flight has become a last-minute problem due to the recent death of Harry Crosby, killed last month in the first test flight of Northrop's XP-75 flying wing jet fighter.

Decisions as to the big wing have not been disclosed, and it can only be assumed that it will be powered with Pratt & Whitney engines. It is known that power will be delivered to counter-rotating propellers mounted above the trailing edge of the wings.

the RCAF Gluster Meteor, the only jet jet-propelled aircraft used in combat in the European theater.

The company is working in conjunction with the Canadian government's Turbo Research Ltd., Toronto, the Royal Canadian Air Force, and with Trans-Canada Air Lines, with a view to having a share in Canada's commercial aviation.

In a significant move of particular interest to engine manufacturers in the United States, Rolls Royce Ltd., of England, has set up a North American technical office at Montreal and plans a service organization throughout Canada to service engines used on the RCAF and commercial aircraft in the Dominion.

Rolls Royce has also set up a major sales department at Montreal and plans to open a plant in civil life of aviation veterans of the armed forces and ex-service charter members in 18 states, thus far operating mainly through contractors with business organizations in their communities.

Offers of assistance for veterans were in evidence in a letter to charter members from Charles B. Wilson, league president, who said that most combat airmen who will be released from the Army and Navy are young as years go and that a great many of them have never been employed, entering the service directly from school.

# Guided Missile Supervision Swings Toward AAF, BuAer

Aircraft industry share in production of airborne weapons seen largely dependent upon final determination of jurisdiction; ordnance departments of both services persist in demands for control.

**Army Air Forces and the Navy's Bureau of Aeronautics appear to be gaining headway in their efforts to control procurement and production supervision of guided missiles and similar airborne weapons, instead of having these functions go to the ordnance departments of the Army and Navy.**

The tug-of-war between aircraft and ordnance men is of particular interest to the aircraft industry. With the aircraft having jurisdiction over the weapons of this type, the aircraft industry would swing heavily in development and production work, a situation which probably would not occur if the jurisdiction was entirely in the hands of ordnance.

**Vague Directives**—However, the line between aerodynamics and ballistics, in this case, is so vague that policy determination in this matter is likewise hazy and an arbitrary line will have to be drawn somewhere between the aircraft and the ordnance men.

Both the Army and Navy have been faced with difficulties in this regard ever since the robot bombs and their like made their first appearance. The Navy it was the Bureau of Ordnance that came to the rescue. At the Army it was the Bureau of Ordnance.

It is the view of some in the services that all airborne weapons that are wing-born, or plane equivalent, should be designed and developed by the aircraft industry. This view is not unanimous, however. Ordinance men contend they should have an important role in the development of these new weapons — many of which are still in the "paper and think" stage.

**Arguments**—The new airborne weapons fly through the air so fast and the AAF contends they should have jurisdiction. But, they have no pilot, so BuOrdn and ordnance persist in the War Department hold they are within their jurisdiction.

Behind the whole question is a

matter of basic policy which the War Department has yet to settle, although it appears that the AAF will have a lion's share of jurisdiction, with some smaller part remaining with ordnance.

It is understood that the Navy, however, has taken direct steps in the matter with the issuance of a directive, but the AAF, publicly at least, merely says that it is logical that the responsibility for the procurement and development of missile-type weapons should remain under their jurisdiction. Beyond that, the AAF does not commit itself publicly, but privately the feeling is strong. There is also the natural desire not to antagonize Congress which is going to be asked for appropriations to develop these devices.

**Baldwin**—A real controversy existed in the Navy for some months over jurisdiction, or otherwise, as the Navy calls it, of the new weapons. The dispute finally was resolved in one of the unapologetic directives which makes the Navy suspicious of these new weapons.

**Phase Two**—After a one-week indoctrination period at the Washington headquarters of NAA, the men will begin covering their territories by car. When available, lightplanes will be used exclusively under an arrangement whereby it is hoped to promote greater use of personal aircraft.

Ann of the new NAA move is

both to expand recruitment of members and to widen NAA service to its originally un-served public.

In the post-war period that has been freely predicted to be the era of aviation's greatest expansion, NAA is seeking to lock up its claim of being the strongest organization devoted to promotion of aviation.

While the oldest association of its kind, founded in 1932 as the successor to the Aero Club of America, organized in 1936, NAA has undergone several complete changes of character. Of late, it has begun to concentrate an educational education in aviation, with emphasis on landing techniques, private flying, air defense, and model aerobatics.

Results indicate that perhaps the successful formula has been found:

In a little more than a year,

pay and allowances. Applications for the force are being examined carefully since it is expected that most of the interim force will make up the permanent organization. Size of the interim force was not disclosed.

## NAA Names Four To Head Regions

New appointments aimed at clutching association's claim to top aviation promotion roles services expand.

Four regional representatives to coordinate activities in the field have been appointed by the National Aeromotive Association, effective Oct. 15.

Lt Col Don C. Johnson, Des Moines, Iowa, a Civil Air Patrol wing commander, is in charge of the northwest section of the country, John McKee, Bendix, Minn., private flier, the southeast, Don Stevens, former airline pilot and Washington representative of the Federal Aviation Association, the southwest. Representative for the northeast has been chosen, but his name is being withheld pending his completion of personal business.

**Phase Two**—After a one-week indoctrination period at the Washington headquarters of NAA, the men will begin covering their territories by car. When available, lightplanes will be used exclusively under an arrangement whereby it is hoped to promote greater use of personal aircraft.

Ann of the new NAA move is both to expand recruitment of members and to widen NAA service to its originally un-served public.

In the post-war period that has been freely predicted to be the era of aviation's greatest expansion, NAA is seeking to lock up its claim of being the strongest organization devoted to promotion of aviation.

While the oldest association of its kind, founded in 1932 as the successor to the Aero Club of America, organized in 1936, NAA has undergone several complete changes of character. Of late, it has begun to concentrate an educational education in aviation, with emphasis on landing techniques, private flying, air defense, and model aerobatics.

Results indicate that perhaps the successful formula has been found:

In a little more than a year,

number of chapters has more than doubled.

Enquiries on all phases of aviation, from all segments of participation, and not just members, are running 20 to 30 a day, with 3,300 received already this year.

Advice of the "support committee service," staffed by noted and experienced engineers and other authorities, is constantly being sought by states and municipalities.

Through aviation observers, both government and private, specifically without exception turn to NAA for advice on what to see and where to go in this country.

NAA is reluctant to talk about number of members, which is believed to be approaching 25,000. Instead, officials speak in terms of services rendered, which is impressive. It has a staff of 123 speakers for public gatherings. Acting as a clearing house of information, NAA has distributed about 160,000 pieces of literature in approximately a year. Most of this consists of pamphlets originally issued by other organizations



## NOVEL NAZI ENGINE PLAN REVEALED:

Similar to our own newly-conceived Douglas XB-42, (Aviation News, Sept. 17), in that power for the rear propeller is fed through an extension shaft from an engine in the fuselage, this Dornier 138A fighter-bomber is pictured publicly for the first time in the above British Air Ministry photo. Unlike the side-by-side engine arrangement to power the American ship's tail-mounted, counter-rotating prop, the German plane uses a tandem arrangement to drive one propeller in the nose and another in the cruciform tail. The same prop engine is mounted ahead of the pilot while the second powerplant is installed behind. Versions of the plane carried one and two persons. (For further discussion of extension shaft powering, see Production section.)

Fairchild Airplane and Engine Corp., will handle aircraft for ANLC in Rio de Janeiro.

Latest ANLC report, as of August 31, shows total surplus declarations received of \$434,783,823. The majority has been salvaged, amounting to \$274,185,894 for aircraft, and \$115,161,389 for parts. Planes and parts sold total \$1,467,663. Aircraft costing \$35,656,750 remained on hand on the books, but were held in the amount accounted of 64 C-45Fs in England, which are valued at \$32,433,584. Eventual sale of these is considered doubtful as they are tankers converted to carrying only gasoline and oil.

One of the major stumbling blocks in ANLC's path—and also one of the principal reasons for the transfer to the State Department—is the desire to receive payment in dollars. Few of the European countries have dollar reserves, and even those are wary of using them until there is a determination of U.S. financial policy toward its Allies.

Actual absorption of ANLC into State will not take place for some time, it is predicted, as the latter department is fully engaged in its own reorganization and in taking over the Office of War Information and other functions recently assigned it.

**St. Louis**—Meanwhile, ANLC is proceeding to enlarge its overseas staff to facilitate disposal. Col. Melvin Hall, former assistant chief of staff at the Ninth Air Force, now an associate duty, will be in charge of aircraft disposal in Europe, with his headquarters in Paris. He will be assisted by a small field staff. John D. Athien, formerly in Latin America for the

accountant, to the office of controller. The office of general accountant was discontinued. McCarthy continues as chief accounting and financial officer. Robbins will have immediate responsibility for all accounting and financial matters of the corporation and its subdivisions, under McCarthy's general supervision.

## AVIATION CALENDAR

- Sept. 16—International Air Show, Farnborough, England.
- Sept. 17—Farnborough, England.
- Sept. 18—Farnborough, England.
- Sept. 19—Czechoslovakia.
- Sept. 20—Paris, France.
- Sept. 21—Paris, France.
- Sept. 22—Paris, France.
- Sept. 23—Paris, France.
- Sept. 24—Paris, France.
- Sept. 25—Paris, France.
- Sept. 26—Paris, France.
- Sept. 27—Paris, France.
- Sept. 28—Paris, France.
- Sept. 29—Paris, France.
- Sept. 30—Paris, France.
- Oct. 1—Paris, France.
- Oct. 2—Paris, France.
- Oct. 3—Paris, France.
- Oct. 4—Paris, France.
- Oct. 5—Paris, France.
- Oct. 6—Paris, France.
- Oct. 7—Paris, France.
- Oct. 8—Paris, France.
- Oct. 9—Paris, France.
- Oct. 10—Paris, France.
- Oct. 11—Paris, France.
- Oct. 12—Paris, France.
- Oct. 13—Paris, France.
- Oct. 14—Paris, France.
- Oct. 15—Paris, France.
- Oct. 16—Paris, France.
- Oct. 17—Paris, France.
- Oct. 18—Paris, France.
- Oct. 19—Paris, France.
- Oct. 20—Paris, France.
- Oct. 21—Paris, France.
- Oct. 22—Paris, France.
- Oct. 23—Paris, France.
- Oct. 24—Paris, France.
- Oct. 25—Paris, France.
- Oct. 26—Paris, France.
- Oct. 27—Paris, France.
- Oct. 28—Paris, France.
- Oct. 29—Paris, France.
- Oct. 30—Paris, France.
- Oct. 31—Paris, France.
- Nov. 1—Paris, France.
- Nov. 2—Paris, France.
- Nov. 3—Paris, France.
- Nov. 4—Paris, France.
- Nov. 5—Paris, France.
- Nov. 6—Paris, France.
- Nov. 7—Paris, France.
- Nov. 8—Paris, France.
- Nov. 9—Paris, France.
- Nov. 10—Paris, France.
- Nov. 11—Paris, France.
- Nov. 12—Paris, France.
- Nov. 13—Paris, France.
- Nov. 14—Paris, France.
- Nov. 15—Paris, France.
- Nov. 16—Paris, France.
- Nov. 17—Paris, France.
- Nov. 18—Paris, France.
- Nov. 19—Paris, France.
- Nov. 20—Paris, France.
- Nov. 21—Paris, France.
- Nov. 22—Paris, France.
- Nov. 23—Paris, France.
- Nov. 24—Paris, France.
- Nov. 25—Paris, France.
- Nov. 26—Paris, France.
- Nov. 27—Paris, France.
- Nov. 28—Paris, France.
- Nov. 29—Paris, France.
- Nov. 30—Paris, France.
- Dec. 1—Paris, France.
- Dec. 2—Paris, France.
- Dec. 3—Paris, France.
- Dec. 4—Paris, France.
- Dec. 5—Paris, France.
- Dec. 6—Paris, France.
- Dec. 7—Paris, France.
- Dec. 8—Paris, France.
- Dec. 9—Paris, France.
- Dec. 10—Paris, France.
- Dec. 11—Paris, France.
- Dec. 12—Paris, France.
- Dec. 13—Paris, France.
- Dec. 14—Paris, France.
- Dec. 15—Paris, France.
- Dec. 16—Paris, France.
- Dec. 17—Paris, France.
- Dec. 18—Paris, France.
- Dec. 19—Paris, France.
- Dec. 20—Paris, France.
- Dec. 21—Paris, France.
- Dec. 22—Paris, France.
- Dec. 23—Paris, France.
- Dec. 24—Paris, France.
- Dec. 25—Paris, France.
- Dec. 26—Paris, France.
- Dec. 27—Paris, France.
- Dec. 28—Paris, France.
- Dec. 29—Paris, France.
- Dec. 30—Paris, France.
- Dec. 31—Paris, France.

## Avco's Holdings Listed For CAB

Inquiry to determine if corporation has financial control of AA spotlights extensive investments and manufacturing interests.

Aviation Corp.'s extensive interests as a holding and manufacturing company have been spotlighted by a stipulation filed in Civil Aeronautics Board's investigation to determine whether the corporation holds financial control of American Airlines, Inc.

The stipulation was one of two signed by John H. Warner, public counsel for CAB, and R. E. Pratt as vice-president and general counsel for Avco. The other waives an examiner's report, the filing of briefs, and oral argument—in action—which placed the case directly before the Board.

**AA Interests.**—Information on Aviation Corp.'s interests shows it owning a 33 percent common stock interest in AA through holding of 387,835 shares, or about a total of 1,398,567.69 common shares outstanding on July 31, 1945.

With approximately 17,400 shareholders, the next largest stockholder was a Boston investment firm—Bishop & Co.—with 18,000 shares recorded in its name. However, the stipulation passes.

### Avco Expansion

Expansion of Aviation Corp., outside the aviation field, is evidenced in the firm's new contract to purchase the controlling interest in New Idea, manufacturer of a wide range of farm machinery and implements.

Victor Emanuel, chairman of the board of Avco, said that under terms of the purchase Avco will acquire in excess of 50 percent of New Idea's 215,000 outstanding shares at \$4 a share under agreement with the four managing officers of the company. Upon conclusion of the transaction, a similar offer will be extended to all other stockholders for a 30-day period. Both transactions will be for cash and will involve a total commitment of \$4,100,000 if all shares are tendered. New Idea has manufacturing plants at Colchester, Ohio, St. Paul, Minn., and warehousing properties at eastern and midwestern points.

out that 30,000 of the outstanding shares of AA common stock are reserved for exercise of a purchase option held by C. R. Smith, chairman of the board of AA.

**Trust Deposit.**—Aviation Corp.'s holdings in AA have been deposited under a trust agreement with Jessie H. Jones, which expires six months after the end of the national emergency—allowed under the original trust agreement dated March 30, 1944.

Loewen, a Pitts-Jackson Aviators Corp., Aviation Corp. is the largest single shareholder with an 8.33 percent common stock interest through the ownership of 516,131 shares. With around 33,643 stockholders, PAA has as its second largest holder the investment firm of Merrill Lynch, Pierce, Fenner & Beane, who hold 113,377 shares in the firm's name, or about 3.97 percent.

Aviation Corp. also holds a 39.5 percent common stock interest in Consolidated Vultee Aircraft Corp. and owns 30 percent of the outstanding common stock of Rosemont Corp.

**Operations.**—Aviation Corp.'s operating units include Northern Aircraft Products Division—manufacturers of aircraft engine parts; Lysenko Division—manufacturers of aircraft engines for transport; Republic Aircraft Products—manufacturers of high precision aircraft engine parts; American Propeller Corp.—manufacturers of hollow propellers, and Spence Heater Division—manufacturers of shrapnel and tank parts.

In addition, Aviation Corp. has a controlling interest of 59.4 percent of founder's stock, or 20.7 percent equivalent, in New York Shipbuilding Corp.—manufacturers of cranes, aircraft carriers, landing boats, etc., a controlling interest of 60.5 percent in American Cabinet Manufacturing Corp.—manufacturers of kitchen sinks, steel cabinets, and wartime producers of bomber wings and Jeep bodies, and a controlling interest of at least 55 percent in Crosley Corp.—manufacturers of household appliances.

### Cartwright, Ellington Join Republic Aviation

Ken Ellington, who has been manager of the Aeronaut Manufacturing Council, Aircraft Industries Association, eastern region, New York, has been named director of public relations of Republic Avia-

### End of APB

The last business of the Aircraft Production Board has been concluded and APB has turned its attention to directing the post Army-Navy aviation program over to the Aeronautical Board.

The production agency divided itself into an executive and administrative branch—the Aircraft Scheduling Council Officer (ASCO) and Aircraft Scheduling Unit (ASU). The Aircraft Production Board played a major role in directing the production of 378,800 aircraft of all types from Pearl Harbor and VJ Day and is praised by WPA Chairman Kruis as "one of the most outstanding and successful examples of coordinated Federal activities developed in this war."

Gen. Corp., Farmington, L. L. Col. H. H. Courtney, recently returned from active service in the European-Mediterranean War theater has been appointed assistant to Republic president Alfred Marlowe.

### Loss Carry-Back Tax Rule Uncertain

These profit less year ending aircraft industry virtually alone is used for application of losses to war years.

Major aircraft industry interest in the "transitional" tax bill, it is indicated, will be in a continuation of the loss carry-back provisions, and the dropping of the excess profits tax.

Work on the bill began last week as Secretary of the Treasury Vinson submitted recommendations calling for repeal of the excess profits tax, and for retention of the carry-back for only one year longer, rather than for at least two years as desired by the industry.

**Loss Effort.**—On the loss carry-back, the aircraft industry is practically standing alone against both the Treasury Department and other segments of American industry. This feature of the present tax code merely provides that losses incurred in an unpredictable year—for example, 1946—can be carried back and be applied against profits of a wartime year.

Treasury opposes the continuation beyond 1946 of the loss



## Here's a Pointer ON PERSONAL FLYING

Ladies and gentlemen, there are two fundamentals of personal flying. The first is a good light airplane that anyone can fly. The second, strips placed allowing the map—even in small towns—to be read in their cars.

The Aeronca people have concentrated on these two fundamentals—designing and building exceptional personal planes, and the provision of landing strips for the use of those planes. The company's complete dealer plan is in to provide places and services personal flying.

Therefore, when the time comes to buy your own plane and fly it, the thing to look for is the name "Aeronca" on the dealer's office and hangar. That is your

assurance of planes easy to buy and easy to fly and the know-how to go with them. Any questions? Then send 20¢ for "Aeronca—the Plane You'll Want to Fly"—to Aeronca Aircraft Corp., Dept. AV-12, Middlebury, Conn.

(Export Agency—Aeronca, Inc., 25 Beaver Street, New York 4, N. Y.)

AMERICA'S PERSONAL PLANE

AERONCA

has an important message for air-minded people



carry-back for three main reasons 1. what is termed the political view that Congress never wants to give money back. 2. it "invites know-how," by possibly encouraging unscrupulous taxpayers to juggle their books; 3. it creates a tremendous administrative problem in that the Treasury cannot close its books finally in a period of two years.

On the other hand, the Treasury is favorable to an extension of the less carry-forward section of the present code. This, while possibly helpful to the aircraft industry, is not as beneficial as the carry-back, industry circles feel. The future is uncertain. It is planned out, while the industry knows it made profits in the past.

► **Other Industries** — Somewhat conversely, that is also the reason the aircraft industry is supporting continuance of the carry-back while other industries show little interest. By-and-large, aviation industry can look forward to increasing profits after the first one or two post-war years. A less carry-forward probably would serve those industries better than a less carry-back.

## Arctic Weather Bill Pushed In Senate

Legislation directing U.S. participation in the development of an international basic meteorological reporting network in the Arctic region has been recommended to the Senate by its Commerce Committee.

The bill, introduced by Sen. Owen Brewster (R-Me.), provided for joint action by the Weather Bureau and State Department, working in cooperation with air lines, to promote the establishment, maintenance and operation of a network of weather reporting stations in the Arctic region.

► **Program Outlined** — A tentative plan for weather service development in the region, drawn up by the Weather Bureau, calls for a \$1,000,000 program, involving ten stations over 500 miles of blank land masses. It was qualified, in testimony before Senate Commerce, however, that this plan is now being worked over by representatives of the State Department, Coast and Geodetic Survey and the Weather Bureau.

Russia, Norway, and Denmark now have 540 weather stations in the Arctic region, according to in-

formation submitted to Senate Commerce.

It was also disclosed that the Massachusetts Institute of Technology has undertaken an independent project to determine whether development for the Arctic

years in public relations work. Dayhoff now has replaced Leonard Kimball who succeeded Leo Baron as chief of TWA's publicity

## Four Air Firms Change Top Posts

Wright Aerostatic, Free Insurance, ERCO, TWA, reshuffle in key executive and managerial positions.

Strengthening personnel lines for renewed wartime efforts, three manufacturers and one transport company late last week announced changes in top executive and managerial positions.

► **Haywood W. Young**, chief engineer of Wright Aerostatic Corp. since 1939, has been appointed vice-president of engineering of that company. With Wright Aircraft since 1928, Young directed development of the Cyclone 18, first engine to attain 2,000-hp, and predecessor of the 2,200-hp Cyclone. Lately, he has been working on jet turbine engine development.

A vice-president member of the Price Instruments Division of Bendix Aviation Corp. is **Leroy D. Kiley**. Who has been executive assistant to the vice-president in charge of engineering. He will concentrate on the Baltimore firm's program of reconversion to civilian production.

Prior to becoming associated with Bendix four years ago, Kiley was president of the Columbus Oil Co. in Washington, D. C., and the Mitchell Oil Corp., of New York City. He was a World War I airman, and not long after VE-Day, he was loaned by Bendix to the Army's AAF to assist in a survey of Germany's technological developments.

► **Engineering and Research Corp.**, Rockville, Md., manufacturer of the Ercoupe, has revealed the appointment of George F. Ryan as director of sales for the spin-proof biplane. He has been head of sales and service for the Ercoupe in New York. Harry Agerer will continue as sales manager.

► **Charles Degollado**, who has been western director of sales and service for Transcontinental & Western Air during the war, has resumed his former duties as director of the western news bureau of TWA at Los Angeles.

Associated with TWA for many

years in public relations work, Dayhoff now has replaced Leonard Kimball who succeeded Leo Baron as chief of TWA's publicity

Fritz went on active duty with



L. D. Kiley

the AAF in April, 1943, and was chief of operations of the Air Transport Command, as a colonel, until September, 1943, when he was assigned to the North Atlantic wing as commanding officer. In June, 1944, he was promoted to Brigadier General. He served as commanding general of the North Atlantic division of ATC since its activation in August a year ago. Before the war, he was operations vice-president for TWA.

## All American Relection

Officers and directors of All American Aviation were reelected at a recent annual meeting. Stockholders voted to fix capital stock at one million shares of common stock with \$1 par value per share.

Officers are Halsey E. Bailey, president; Harry R. Springer, vice-president; Charles W. Wead, vice-president-treasurer; Edward E. Mizner Jr., vice-president-manufacturing; William B. Moore, vice-president-operating; Austin M. Zimmerman, secretary and general counsel; Harry S. Fries, assistant treasurer; Walter C. Gebelau, controller; and David L. Miller, assistant secretary.

## AS WESTERN AS

### THE

# Golden Gate

**GOLDEN GATE** — a sight that holds the tourist breathless, beyond, the city is sheltered, the filled waterfrogs still swaying under the nose of war. Market Street, Chinatown, Twin Peaks, Fisherman's Wharf and the Berkeley Hills looming above the East Bay. A vacation is heaven, rich in history, scenes, red colors.

**WESTERN AIR LINES** — the line grows with the West, serving the Western traveler and shipper. In 1936 Western Air carried the first commercial air mailster between Los Angeles and Salt Lake — was first to use double-motorized passenger planes between Los Angeles and San Francisco. Today, Western Air serves San Francisco and 27 other Western cities in 7 states and Western Canada.



## WESTERN AIR LINES

AMERICA'S PIONEER AIRLINE

General Traffic Offices: 510 Hill Street, Los Angeles 24

# LABOR and MANAGEMENT MEET— for PEACE or CIVIL WAR?

Tax prospect of a knock-down and drag-out fight in the statewide industry does not auger well for the recession outlook, which upon every other score is bright. Any widespread outbreak of the type of industrial warfare which now threatens will disrupt more thoroughly than anything else on the horizon, an orderly transition to a peacetime economy.

It is doubly unfortunate that there should be a general Righting of tides and company battle lines upon the eve of the Labor-Management Conference, which on November 8th will converge at President Truman's direction for the purpose of "working out by agreement means to minimize labor disputes." If the current work stoppages occasioned by industrial conflicts should increase rather than diminish between now and November first, the Conference atmosphere hardly promises to be favorable to a dispassionate examination of basic issues.

Yet the shadow of the threatened industrial gloom that hangs over the Conference only serves to emphasize the importance of reaching satisfactory agreement upon two problems with which such a Conference might deal. The first is that of determining what machinery shall be used for settling disputes over which employers and workers have reached no peace. The second, and more far-reaching, is that of arriving at some common understanding upon the major issues which commonly lead to irreconcilable disputes.

## Settlement of Wartime Disputes by the War Labor Board

During the war the first problem was handled largely by machinery centered in the National War Labor Board. Supported by general adherence to patriotic pledges by labor leaders and employers not to resort to the use of economic force against each other during wartime, and backed up on rare occasions by use of the President's power to seize plants for war purposes when its orders were not obeyed, the Board managed, by what amounted to compulsory arbitration, to settle the nation's wartime labor disputes with relatively little economic loss.

But it can scarcely be claimed that the War Labor Board did much to resolve the issues from which disputes grew. Indeed, the fact that it was available to settle disputes in cases which the Secretary of Labor certified as likely to lead to substantial interference with the war

effort,<sup>1</sup> resulted in the conversion into full fledged disputes of many disagreements which would otherwise have been settled at a local level in the course of collective bargaining. Meanwhile, local collective bargaining machinery which should have been doing most of the work was neglected, and will need through readjusting efforts to be brought back to its prewar level of effectiveness.

With V-J Day comes an abrupt change in the status of the War Labor Board. One of its main goals, labor's "no strike pledge," was promptly withdrawn. It could no longer rely on the President to use his power to settle disputes for war purposes to forestall pledges in its orders. Consequently the Board agreed that it would accept new cases only if both parties to the dispute stipulated in advance that they would abide by the Board's findings, that it would clear its dockets of old cases as rapidly as possible, and that it would then go out of business, leaving to the Labor-Management Conference the question of what should take its place in the postwar period.

## What Shall Take the War Labor Board's Place?

The immediate and present task of the Labor-Management Conference is to agree upon machinery for settling industrial disputes in the peacetime economy.

Neither management nor labor wants the continuation of emergency arbitration to which they submitted as a necessary war measure. But it must be clear to everyone that if any substantial proportion of the disputes that inevitably arise are settled by resort to strikes and lockouts, economic stability will result. Not only will it be impossible to achieve the high levels of output and employment that have been set as postwar goals, but it is questionable whether our economy could survive. The only alternative to compulsory arbitration under government auspices is for management and labor to demonstrate their ability to effect a peaceful resolution of their differences without it.

The most obvious need is to set up local machinery at the grass roots where disputes erupt. That is where most of them should be settled by local negotiation and, when that fails, through voluntary arbitration to mediation or arbitration under terms of reference to which the parties agree. Many unions, at plant level are relatively simple in character, are built up to formidable discretion and compulsion when they are ganged along

the line for decision in Washington. The neutralizing process is one that frightens everyone connected with it because it focuses attention upon the possible importance of precedents established by a decision, either than upon resolving satisfactorily the particular dispute at hand.

Consequently, some Federal machinery must be provided which may be called upon in cases where the more or less permanent of a threatened dispute clearly transcends local jurisdiction. That will mean the thorough reworking of conciliation and mediation machinery which exists, but which has grown rusty during wartime while compulsory arbitration was the order of the day.

At least, this involves a complete rethinking of the United States Constitution Service with a noteworthy strengthening of its personnel. There may be wisdom also in recently advanced suggestions for the creation of a board of arbitration to sit in cases voluntarily submitted by the parties concerned, and for boards of inquiry to make reports upon the merits of disputes in which the public interest is concerned. But there is valid ground for questioning what appears to be the common assumption that such machinery should be located in the Department of Labor. It belongs neither there nor in the Department of Commerce. For the work which such agencies are called upon to perform, both the appearance and fact of complete impartiality are essential to effective performance. Assurance of impartiality will not be furnished by placing them in a department specifically charged by Congress with the task of advancing the interests of wage workers.

## Resolving the Issues Over Which Disputes Arise

It may be, as many think, that the forthcoming Labor-Management Conference cannot effectively handle any problem beyond the procedural cases suggested above. If that is true, its agenda probably should be restricted to placating the reactivation of collective-bargaining and dispute-settlement machinery, in view of the urgent need for putting it in working order.

But either in this Conference, or in subsequent ones, there will have to be an attempt to reach a reasonable measure of labor-management accord upon certain basic issues over which most industrial disputes originate. The best of machinery can be composed if disputes are generated in ever-increasing numbers.

Most important of such issues is that of the fair determination of wages. There is clear need for reaching agreement at least upon the wage factor on which such determination should rest. It seems evident that if we are ever to hope to reach the high levels set out and generally accepted as postwar goals, we must harness economic incentives to promote productive efficiency. That means that workers' wages must be increased, and that a greater share of increased productivity. We never had a formula in mind, but we should be able to agree upon general principles for dividing returns derived from improved performance in output between workers and investors, and consumers in the form of lowered prices.

Again, since unionism is here to stay, general accept-

ance by management of the principle of collective bargaining would settle irreconcilable disputes which are concerned more with the method of negotiation than with the substance sought. For in management still questions the validity of the collective bargaining process as such, but there are many matters to be resolved of which the question of the open shop, the union shop, or the closed shop is merely a consequential example, upon which there is wide divergence of opinion between and within labor and management groups.

On the management side, there is sincere concern about the morale or ability of union leaders to exercise responsible control that assures compliance with contractual obligations. Wild-cat strikes are of sufficiently frequent occurrence to give substance to the distrust, and union discipline seldom has been administered in a decisive or effective fashion. The prospective unity of three competing labor organizations of national scope gives management little confidence that a bargain made and kept in good faith with any one of them provides someone against whom work stoppages.

All of these matters, and many others, need thrashing out between management and labor, with the view of arriving at as large a measure of specific and detailed agreement as can be achieved. The greater the area of such agreement, the smaller will be the area for disputes that must be handled by settlement machinery, or put to the final test of law.

## Peace or Civil War in Industry

The Labor-Management Conference is of major importance to national welfare. It is important even if it restricts its objectives to the procedural problem of how industrial disputes are to be handled.

It can render no creditable contribution if it lays the groundwork for an attempt to reach working agreements upon such policy issues as have been cited above.

Neither management nor labor can afford to lead negotiations less than their best intelligence and effort to an attempt to arrive at common understanding. Success will mean that we have a genuine chance of reaching new levels of economic well-being. Failure will mean (post) civil war, in which the casualties will be high. One almost certain casualty of such a war will be the principle of collective bargaining, since the Government can scarcely refrain from establishing compulsory arbitration of sufficient broadness to cover.

It is to the vital interest of both management and labor to demonstrate that they can responsibly control themselves.



President McGraw-Hill Publishing Co., Inc.

## FINANCIAL

# Railway Express Adjustments Asked By Airlines' Committee

Group believes air carriers have been deprived of sizeable revenue through Agency's power to enforce and interpret contract terms; retroactive income assessment, improvements, thorough reorganization recommended.

Declaring there are grounds for believing the airlines have been deprived of substantial revenues because of interpretation of Railway Express Agency contract and enforcement of it, the firms have been left solely within the Agency's discretion, the Airlines' Committee on Audit Survey of RRA has adopted formal recommendations to obtain equitable adjustments to air express accounts.

Under the present Air Express Agreement, which demands accurate cost accounting, the committee concluded that the airlines have been placed at a disadvantage by the size, complexity, and decentralization of the Agency. Nothing short of a thorough reorganization to achieve precision in accounting and adequate internal controls would make it possible for the Agency to discharge its obligations as the contract provides, the committee said.

**Costs & Requirements** — But, even then, the Airlines' Committee emphasized, a "cost-plus" contract would be undesirable because of the Agency's peculiar freedom from competition, lack of responsibility for profits and losses to its railroad owners and possible expense associated with the cost accounting demanded.

The survey of RRA and the study made by Ernst & Ernst (AVIATION NEWS, July 2) indicates there have been errors "large and small" affecting the revenues of the airlines. While the committee said in its report that "nowhere" was there a suggestion of bad faith, it noted that "subordinate personnel, left untrained, in the application of such vague contract 'cost-plus' pocket coins" have naturally tended to favor their employer in matters requiring judgment.

The committee said, however, that the airlines were in a posi-

tion to take a firm stand, basing upon both retroactive adjustments and future improvements in accounting and control methods.

► **New Terms** — "But from a longer viewpoint," the committee cautions, "the solution must be found in new contractual terms clarifying the method of computing costs for the agency."

The Airlines' Committee determined its report on RRA should be treated as follows:

- 1) It should be submitted to Air Corps, Inc. with copies to all stockholders;
- 2) Air Corps, Inc., should be requested to refer all recommendations requiring action to such appropriate committees as may be deemed necessary;
- 3) These recommendations requiring decisions of policy, together with the conclusions of the committee, should be directed by Air Corps, Inc., to the attention of the directors of the Air Transport Association.

The committee directed for immediate action the following:

- Immediate action should be taken to obtain equitable adjustments to the air express accounts.
- The Agency should be directed to discontinue immediately the uncertainty which exists in connection with the computation of fixed cost-per-hour.

- The Agency should be directed to discontinue immediately the uncertainty which exists in the computation of per-shipment costs and then adhere to its own instruction.

- The Agency should immediately discontinue the uncertainty that exists in connection with the assignment of exclusive vehicles and any formula adopted should be adhered to regardless of the benefit to either party.
- The Agency should discontinue the uncertainty that exists in connection with the breaking point

as between air and rail expense on consolidated business.

► In order to help accomplish the foregoing, RRA should establish a Standard Practice Manual for use by all supervisory personnel and other employees in connection with its conduct of the air express business.

► The Agency should discontinue the practice of charging vehicle costs for clerical work and under no conditions should RRA charge the pool with any such expense incurred at the direct request of any airline. Expenses in connection with such requests should be assumed by the airline responsible.

► The Agency should discontinue the practice of changing vehicle costs for over-time, actual time, overtime, and so forth.

- Revised procedures should be made standard throughout the Agency.
- A standard policy should be adopted with respect to retroactive adjustments and full disclosure made of all such items.

► The Agency's method of reporting gross revenue should be altered and expanded.

- The equity of generating expenses as between PAA and domestic air express on a shipment basis should be questioned.

- The Agency's revenue distribution costs should be reviewed.

- The Agency should take such steps as will result in the establishment of a centralization of its internal control in general, and permit its accounting department to exercise further control.

- The committee also made a number of other recommendations for action after further industry consideration, including a change in the basis of claim apportionment, new methods of revenue allocation, and the reduction of revenue apportionment expenses through the adoption of standardized rate tables.

## Nashville Airport Bonds

The City of Nashville, Tenn., has sold \$10,000,000 worth of bonds to a syndicate headed by Harris Trust & Savings Bank, of Chicago, at a split interest rate covering a period of 25 years. The bid was 8 percent on \$35,000 in bonds expiring in 1960, 14½ percent on the remainder expiring in 1949 through 1952.

## PERSONNEL

### Allison Modification Unit Fills Four Top Posts

Allison Division of General Motors Corp. has announced four personnel appointments at the West Coast Aircraft modification center in Long Beach, Calif., in a single month.

John C. Haskett becomes chief pilot for the XH-19. Alfons

the capacity of West Coast representative of the various activities of Fairchild. Adams will have with him William C. Bachelder, well-known mechanical engineer and consultant; A. A. Bonn Blumstein, formerly with the U.S. Office of the Naval Air Materiel, and Michael J. Blundell, formerly of Consolidated Vultee Aircraft Corp.

### L. R. Crandall Named To C-W Directorate

Curtiss-Wright Corp. has announced elevation of Lou L. Crandall as director. Crandall is president of the George A. Fuller Co., and an officer and director of several other companies. He fills the vacancy on the board created by the recent death of Charles W. Lowe, who was vice-president and director.

John B. Massey (pilot) has been appointed director of engineering and research, and Harry E. Englehardt Corp. to succeed.

Karl Marshall, a former test pilot, becomes general manager of research laboratories. Massey has been chief of applied research for Prost

and Whitney Aircraft for the past two years and formerly was chief of the engine laboratory of the Curtiss Corp.

Philip C. Wagner, formerly vice-president of Parks Air Transport, has joined the staff of the Parks Air College. He has been director on the board of such organizations and also was on the board of Parks Aircraft Sales & Service, Inc. The announcement did not disclose the executive's future plans.

Carl C. Thompson, vice-president of public relations for United Air Lines, has been appointed traffic manager in Washington. On completion of his tour in the airbase business for twenty years and was with United for six years. He was a director of the Airline War Training Institute, and is a director of the National Aerospace Association.

Joseph A. Nekemach, formerly chief of the Air Transport Division of the Foreign Economic Administration, has joined Moore-McCormack Lines, New York, as head of their traffic department. During the war it was the responsibility of the Air Transport Divi-



### UAL VICE-PRESIDENT

Col. Roy W. Ireland, telephonics or vice-president, administration, of United Air Lines, has been announced Col. Roy Ireland will be honorably discharged as deputy chief of staff, Air Transport Command. He has been on leave from United.



Park's announcement said he resigned from the War Department to accept the airline post, where he will be assigned to specific projects, the first dealing with cost control throughout the C-8 organization.

John G. Perkins, until this week a colonel in the Army Air Forces, is resigning his former position to join the manager of Delta Air Lines. Serving as chief of staff of the Air Transport Command's European Division, Colonel Perkins was awarded both the Distinguished Service Medal and the Legion of Merit, primarily for his work in establishing air transport service in support of military operations in the European and Mediterranean areas. He has been traffic manager of Delta since 1934, and became vice-president and a director in 1938.

Alvin P. Adams, formerly a vice-president and director of the Fairchild Engine and Airplane Corp., has resigned to devote full time to the management of his western west coast interests. Adams' company, Adams and Associates, will serve in

PA's aeronautics division. Maj. Fred C. Klein (pho), former traffic manager, has been appointed assistant traffic manager in Washington. On completion of his tour in the airbase business for twenty years and was with United for six years. He was a director of the Airline War Training Institute, and is a director of the National Aerospace Association.

ATC's regional air priorities controller office in Pittsburgh, Lt. Col. Maylo C. Gaines has returned to duty as a C-47 pilot and is based in Berlin. James E. Lopeman has been named district traffic manager in Cleveland.

W. Gordon Wood has been appointed assistant traffic manager for Trans-Canada Air Lines, with headquarters in Vancouver. Wood has been an Air Observers Pilot with the Royal Canadian Artillery. Before joining ATC he served with Pan American Airways.

## PERSONNEL — 19

## PRODUCTION

### Extension Shaft Power Plan Offer New Design Possibilities

Removal of engines from aerodynamic surfaces through use of well tested transmission lines believed answer to many problems facing large plane development; Allison experiments offer radically new powerplant installations.

By ALEXANDER McSURELY

Transmission of propeller power from liquid-cooled engines submerged in an airplane's wing or fuselage, by means of an extension shaft, appears likely to become increasingly important in large airplane designs of the next few years.

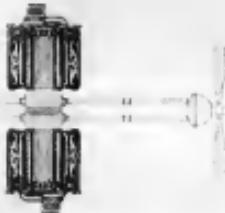
Most interesting recent example of the extension power shaft use is a new design in the Douglas XB-42 "Mooraine" bomber and the DC-4 Skymaster, commercial version with identical power arrangement.

**Engines:** Plan—These planes use two Allison V-1710 engines, mounted

in the fuselage behind the cockpit, to drive counter-rotating propellers at the tail, by means of extension shafting running the length of the airplane (Aviation News, Sept. 17).

By this novel arrangement, the Douglas design eliminates the need for mounting engines in the wings thereby eliminating engine nacelles and permitting the aircraft to retain a smooth aerodynamically useful surface.

It is estimated that the design saves 25 percent of the total drag factor of the airplane, by making the nacelle unnecessary.



Two V-3420 engines to drive pusher and tractor propellers



Two V-1710 engines in tandem

### Allison Bid

Extensive new flight testing facilities of Allison Division, General Motors Corp., at Indianapolis municipal airport, indicate that the organization is making a strong bid to hold its place as leader in aircraft engine manufacture. The new flight test hangar and facilities on a 40-acre site south of the airport, are directed by Don R. Berlin, head of installation experiments.

Construction, flight tests are being made with the XB-38, Allison-powered version of the B-25 Superfortress. The company has also purchased a surplus B-17 bomber for use as a flying test stand for Allison engines. The new facilities now provide opportunity to flight test some of the new engine extension shaft arrangements, which company engineers have designed.

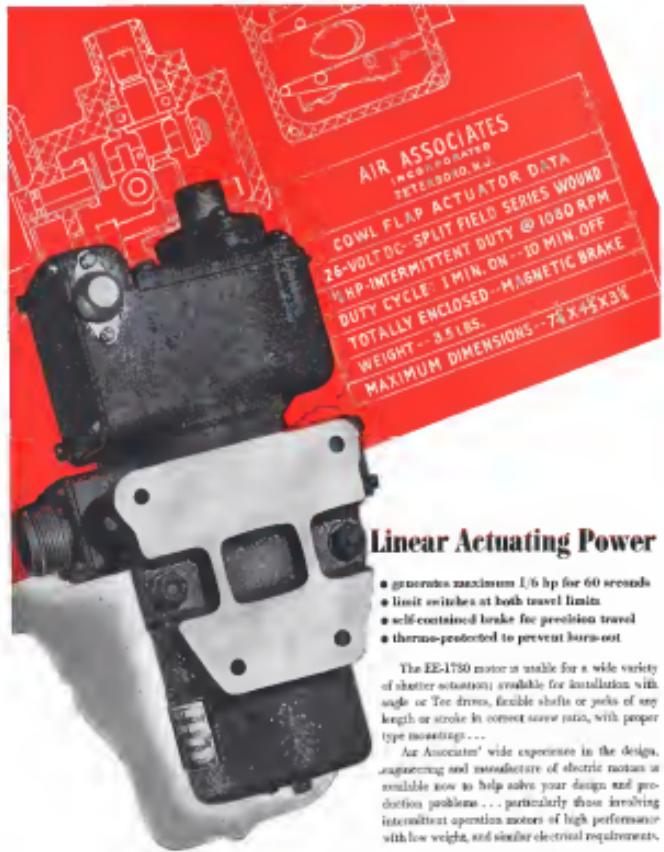
**Fastest:**—Radiators for cooling the liquid-cooled Allison engines are mounted on the leading edge of the wings near the root. The bomber version is credited with a top speed of 410 mph, making it the first bomber in the 400-mph class to be announced by the AAF.

Engineers of the Allison engine division, General Motors Corp., have done considerable experimenting with the use of extension shafts in many arrangements with their engines, all with a view to eliminating drag by submerging the engines at remote locations from the propellers.

Earlier arrangements of Allison powerplants with extension shafts, were found in limited places, as witness by Bell Aircraft Co. in the remarkable "multi-plane fighter" the XFM-1 Avanada, and the better known P-39 Airacobra and its later development, the P-63 Kingcobra.

**Perfect Reward:**—An interesting sidelight on the experience with shafts in these planes is the report by Allison that, despite the unconventional shaft arrangement, there is no record of any case of shaft failure in any of the hundreds of Bell P-39 and P-63 fighters which were built with the engine buried in the fuselage behind the pilot. An extension shaft ran from the engine through the bottom of the cockpit to a gearbox and propeller in the plane's nose.

The General Motors experimental lighter XP-73, which used the Allison V-3420 engine, also had a



### Linear Actuating Power

- generates maximum 1/6 hp for 60 seconds
- limit switches at both travel limits
- self-contained brake for precision travel
- thermal-protected to prevent burn-out

The EE-1730 motor is usable for a wide variety of shifter solutions; available for installation with angle or Tee drives, flexible shafts or rods of any length or stroke in correct screw pitch, with proper type mountings ...

Air Associates' wide experience in the design, engineering and manufacture of electric motors is available now to help solve your design and production problems ... particularly those involving intermittent operation motors of high performance with low weight, and similar electrical requirements.

### Air Associates

INCORPORATED  
TEETERBORO, OHIO BRANCHES: CHICAGO, BALTIMORE, LOS ANGELES — ENGINEERS AND MANUFACTURERS OF AIRCRAFT SPECIALISTS — SUPPLIERS OF ALL TYPES OF MATERIALS TO THE INDUSTRIES SINCE 1917



V-3420 engine unit "right-angle" shafts

similar engine placement and turned a six-blade dual rotation propeller with extension shafting.

Studies by Allison engineers have gone well beyond these developments into combinations of engines, shafting and gear boxes which offer a wide range of flexibility in design.

**The Versatile**—Among these are:  
A tandem arrangement of two V-1710 engines, in which the extension shaft of each engine independently drives one of a pair of counter-rotating propellers through a hub-and-spur gear assembly. The combination has the power output of a V-3420 engine, with the advantage of twin-engine reliability as it permits full feathering of either propeller and continued operation of the other engine. (See illustration.)

Another arrangement places the V-3420 engine in the fuselage opposite the wing roots and uses two sets of bevel gears in a housing mounted on the front of the crankcase. Each set of gears furnishes power from one of the "double" engine's two shafts. Extension shafts are driven from both sides of the bevel gear housing and extend out through the wings to reduce gear assemblies. Other shafts carry the power at right angles from the assemblies to propellers mounted either as trimmers or pushers. This arrangement makes the powerplant easily accessible and requires only a slender wing nacelle to accommodate the reduction gear and shaft. (See illustration.)

Probably most elaborate of the suggested arrangements places two V-3420 units, mounted in opposed position, presumably in the wing of a large plane, larger than any yet flying. Allison calls this a DV-4500 engine, and it would drive, by extension shafts, two

but it is understood that their experiments have not been as extensive as those by the American company.

## New Plane Fuels Hike Engine Rating

Engine Marketers increase new questions as permit power boost without adding weight or size.

A new line of aviation gasoline, designed to increase permissible power and lower engine maintenance costs, are being introduced by Esso Marketers.

R. C. Oertel, manager of aviation sales, said Grade 80, designed for the engines of private planes, is a clear gasoline with a fall 83 octane rating that is obtained without the addition of tetra ethyl lead.

**Protected Reserves**—This type of fuel, which was unavailable before the war, will reduce top cylinder temperatures, Oertel said, and allow designers of small engines to improve performance without increasing engine size and weight. He said it will also provide added protection against detonation for private plane engines now in use that were built to use 78 octane gasoline.

Grades 85 and 100, the gasoline used largely for commercial and military operations possess new qualities heretofore unavailable with higher permissible takeoff power and lowered lead content, the prime factors.

## Fairchild Camera Plans Non-Aviation Expansion

Fairchild Camera and Instrument Corp., long one of the leading military and commercial aviation suppliers, intends to develop a large non-aviation business, according to vice-president C. A. Morrison.

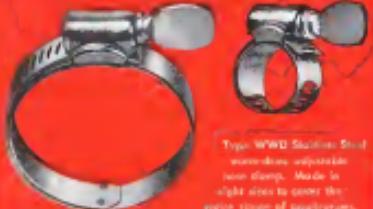
In an address marking the company's twenty-fifth anniversary, Morrison stated that the firm will bring out a complete line of sound equipment for use of radio stations, schools and colleges. Before the war, Fairchild's non-aviation business was merely a sideline. However, Morrison said, "It is my belief that we can have half as much business from this line alone as we secured from all kinds in the years immediately preceding the war."

## Surplus Storage

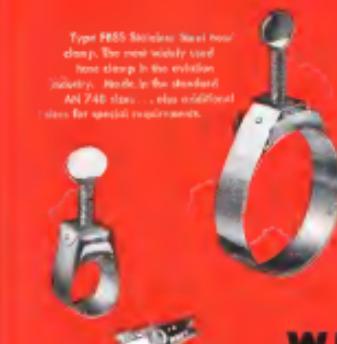
Rooms for storage and maintenance of surplus aircraft and plant items awaiting disposal have been accepted from prior control by the Office of Price Administration.

The contracts apply to contracts entered into by the Office of Price Administration. Care for the storing and maintaining of surplus property services under the contracts vary so widely, OPA states, that separate ceilings would be necessary for each contract.

# For Utmost Dependability.. WITTEK Aviation HOSE CLAMPS



Type WWD Stationary Steel  
adjustable hose clamp. Made in  
eight sizes to cover the  
entire range of applications.



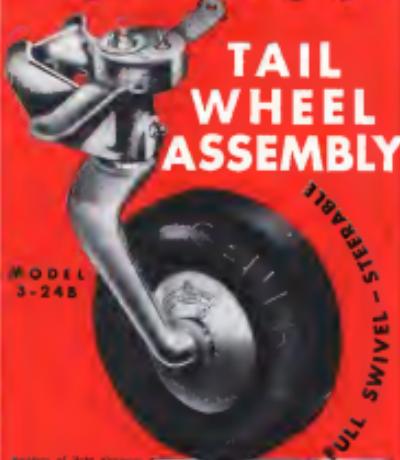
Type PMS Stainless Steel Hose Clamp. The most widely used  
hose clamp in the aviation industry. Made in the standard  
AN 748 sizes... plus additional  
sizes for special requirements.

Keep Buying Victory Bonds

**WITTEK**  
MANUFACTURING CO.  
CHICAGO 22, ILLINOIS

**Aviation  
HOSE  
CLAMPS**

**Scott**



Builders of 2400 airplanes seeking a self-contained tail wheel assembly will be interested in three features of the Cal-Approved Series Model 2000. Simplified, automatic, reliable, smooth action, bearing-free-duty bearing. Precision action nose assembly. Drag-hinged single arm link. High-strength aluminum alloy wheel carriage. Broken ground-pivoted system of bearings. Full ground cast. Tight dust cap complete basic as required.

SPECIFY AS

**Standard**

 **Scott**  
AVIATION CORPORATION

2004-2005  
LANG高級法語  
周、王、  
林、王、

SPB 'Reserves'

In an attempt to speed up disposal of properties, Burgess Property Board has directed disposal agencies to set up reserves to supply priority buyers. Formerly, other customers had to wait for more than 30 days in order that holders of priorities could have first choice.

Quantities of reserves to be maintained will be decided by deposit agencies on the basis of previous experience. Semistar War Plants Corp. will assist in determining size of reserves to be held for veterans and small business. Agencies are required to review and adjust reserves periodically to avoid stockpiling.

## Luscombe Output Centers At Dallas

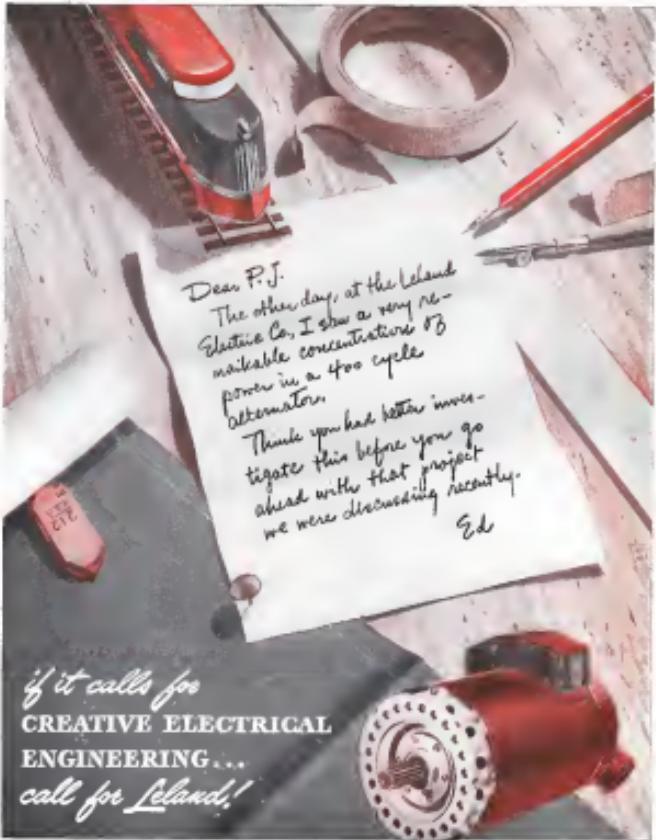
Lanscombe Airplane Corp. has transferred plans to manufacture all its airplane manufacturing in its two Dallas, Texas, plants, discontinuing its aircraft activities at Trenton, N. J., where one ~~four~~ plant was formerly located.

Leopold Klotz, president, said that four new locomotives had already been completed in the assembly plant at Garland, new Dallas, where a line is now in operation. Machine shops and executive offices are set up in a downtown Dallas plant, with production offices and other subsections for the suburban plant now nearing completion.

First Lucomber to be produced resembles closely the previous all-metal Lucombe Shrike which in 1940 set a speed record of 116-mph. for gliders in its class.

## **Swedes Tour Air Planes**

The commanding general of the Swedish Air Force, Lt. Gen. B. G. Nordenhak, is making a study of the aircraft industry in this country. Accompanied by Maj. Gen. Nils O. Soderberg, he is touring AAf installations and production centers as a guest of the air forces. Brig. Gen. Patrick W. Bertram, chief of staff of the U. S. Eighth Air Force, is conducting the 12-day tour.



 THE Leland ELECTRIC COMPANY

Makhan, Ganganath, Gurur Gopalaswamy and Vellore Rajendran

# NEW HARTWELL PUSHBUTTON LATCH



*Waterproof and Airtight*

## Complete flushness achieved in latest addition to Hartwell line of flush latches

You have to look twice to see the new Hartwell Pushbutton latch when it is installed. The only exposed part is the recessed, completely flush, circular rubber button and base bar.

Finger tip pressure opens and closes the latch! Due to its unusual design, it is water and airtight. The higher the pressure of either fluids or gases, the tighter the seal.

The toggle action of the latch, actuated by a torsion spring, assures a positive lock in either the open or closed position. Through seal - 2 weight approximately 1 oz - the Pushbutton latch withstands normal loads.

For an absolutely flush surface, solid or gasket seal, get the Hartwell Pushbutton latch. Hartwell also makes these magnificient, flush latches: Standard, Heavy Duty (1,000 lb. load) and Utility.



**HARTWELL**  
AVIATION SUPPLY COMPANY

1417 Grandview Boulevard, Los Angeles 16, California  
Dallas, Texas • Kansas City, Kansas

## Plant Status

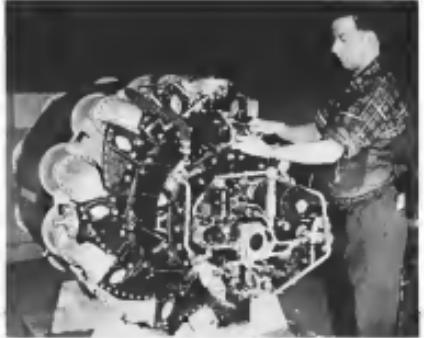
Registrations for the following large aircraft and engine plants are reported, by the Reconstruction Finance Corp., to be in an advanced stage. Listed is original construction cost for plants named.

Airavia Corp.	\$4,389,308
Consolidated-Vultee	33,725,308
Convair	1,000,000
Miami Springs, Fla.	3,079,308
Allentown, Pa.	4,115,308
Curtiss-Wright Corp.	
Buffalo, N. Y.	47,571,308
St. Louis, Mo.	34,954,308
General Motors Corp.	1,000,000
MacArthur Field, St. Louis, Mo.	155,614,308
Trenton, N. J.	11,569,308
Cleveland, Ohio	38,802,308
Indianapolis	65,973,308
Glendale	1,000,000
Republic Aviation Corp.	1,000,000
Farmington, N. Y.	2,742,308
Wright Aerocraft Corp.	
Palmerton, N. J.	45,252,308

Two or more prospective purchasers have expressed interest in the remaining plants, according to RPC.

American Propeller Corp.	\$6,289,328
Bell Aircraft Corp.	
Rochester, N. Y.	33,943,308
Boeing Aircraft Co.	
Seattle, Wash.	33,314,978
Carolina Wright Corp.	
Columbus, Ohio	31,781,308
Lake Charles, La.	1,000,000
Coldwater, Mich.	3,068,308
Kansas City, Mo.	5,263,308
Locust Grove, Ga.	13,943,308
Douglas Aircraft Co.	
Long Beach, Calif.	34,074,314
Seattle, Wash.	6,723,308
12 plants	636,538
Hughes Aircraft Co., Inc.	
New Orleans, La.	31,106,828
Jacks Aircraft Corp.	
Pittsburgh, Pa.	24,917,308
Lockheed Aircraft Corp.	
Santa Barbara, Calif.	31,816,308
12 plants	8,775,308
North American Aviation, Inc.	
Kennedy City, Mo.	15,313,308
Grand Prairie, Tex.	34,507,308
Inglewood, Calif.	10,413,318
Northrop Aircraft, Inc.	
Burbank, Calif.	6,781,308
(3 plants)	4,163,318
Republic Aviation Corp.	
Eastside, Wash.	16,517,408
United Aircraft Corp.	
Hartford, Conn.	55,273,308
(3 plants)	353,648
Bridgeport, Conn.	1,113,304
Stratford, Conn.	6,127,308
Wright Aerocraft Corp.	
Paterson, N. J.	29,702,719

Grand Prairie, Tex.  
Inglewood, Calif.  
Northrop Aircraft, Inc.  
Burbank, Calif.  
(3 plants)  
Republic Aviation Corp.  
Eastside, Wash.  
United Aircraft Corp.  
Hartford, Conn.  
(3 plants)  
Bridgeport, Conn.  
Stratford, Conn.  
Wright Aerocraft Corp.  
Paterson, N. J.



## FIREBALL JET POWERPLANT:

This type of General Electric jet propulsion engine teams with a conventional Wright Cyclone in generating power for the Navy's new Ryan Fireball jetplane. The two engines are mounted in a joint fairing on the front of the engine. In the Fireball the engine is housed in the fairings between the cockpit and tail.

## Merger Reports Denied

Recurring rumors in the industry and in financial circles of a Curtiss-Wright and Lockheed merger have been termed "just rumors" by Guy W. Vaughan, Curtiss-Wright president. In making the statement to stockholders, Vaughan separated the company in sound financial position, disclosed that Curtiss has a contract for 16 Commando transports with Eastern Airlines and is negotiating to increase business of this type. He stated that the company had made no plans to enter the aviation field. He commented that the personal plane market does not seem particularly profitable at this time.

## Acro Parts Co. Sold

The Acro Parts Manufacturing Co., of Wichita, Kansas, which during the war had major subcontract with Boeing, Convair and Curtiss-Wright, has been purchased by the U.S. Challenge Co., Batavia, Ill., and will be converted to the production of farm equipment.

Dr. Henry M. Gassman, president of Challenge and the U.S. Engine and Pump Co., and the Wichita operation will employ 500 at the outset and 3,000 when production

is attained. Operations will begin within 10 days. During the war, Acro Parts manufactured up to 2,500 per month. It was one of the few companies to be established and has been out of operation since last April.

## Contract Appeal Chief

New chairman of the Contract Settlement Appeal Board of the Office of Contract Settlement is Edward J. Donnick, New York attorney, editor of the American Bar Association Journal and a member of the faculty of Yale Law School. He succeeds Robert S. Stevens, who has been recalled to his post of dean of the Cornell University Law School.

The board hears appeals from war contractors regarding the findings of contracting agencies in the settlement of terminated war contracts.

## Bendix Income Report

Net income of \$10,978,843, or \$9.40 per share, for the nine months ending June 30, 1945, has been reported by Bendix Aviation Corp. The net is slightly less than three percent of sales and other income. For the similar period the preceding year, Bendix net was \$12,159,484, or \$5.74 a share.

## AIR FORCES

### COMMENTARY

## Radiation Laboratory Record Forecasts Electronic Advances

Wartime success of cooperative scientific enterprise at MIT kept nation ahead in radar research.

"This is a physicist's war."

These words by Dr. James B. Conant, president of Harvard University and one of the top-drawer figures in America's "Scientific high command," were not spoken toward the end of the conflict, when millions of men and women, in and out of the armed services, knew something at least of radar, the proximity fuse, atomic energy, rockets, etc.

¶ Foreign—they were uttered at 1945, shortly after the creation of the Office of Scientific Research and Development of which Dr. Vannevar Bush, former chairman of the National Advisory Committee for Aeronautics, was director.

The words fell largely on uncomprehending ears, and it is safe to say that as we go farther into

the new age that is dawning and realms from practical experience come of the varieties of electronics, atomic power, etc., their essential meaning will be more clearly grasped, and the need for this country to maintain an adequate research program more generally appreciated.

One of the most fruitful of the cooperative scientific enterprises in this country, and one which definitely played a most vital part in the Allied victory, was the Radiation Laboratory, located at, but not a part of, the Massachusetts Institute of Technology, Cambridge.

¶ Star Staff—Started in October, 1940, after the visit of a British scientific mission headed by Sir Henry Tizard, Radiation Lab

war's end had a budget of \$4,000,000 per month, with a staff of scientists and engineers comprising an estimated 20 percent of the nation's top-notch physicists.

Operating under the general supervision of the Radar Division of the National Defense Research Commission (part of OSRD), Radiation Lab was the Allied spearhead of a huge international cooperative research and development enterprise aimed at providing its fighting forces with the most advanced radar equipment which they required to do an effective job.

This involved not only cooperation with British and American agencies and forces, but with access of government, university and industrial laboratories, and with a couple of hundred prime manufacturers and thousands of subcontractors which turned out some two billion dollars worth of radar sets directly on Radiation Laboratory research.

¶ Top Task—Its main assignment and the chief reason for its existence was the development of microwave radar of 3,000 megacycles and up, in the ultra-high frequency field.

In the billion-cycles-per-second range it had been found that the radio pulses could be made much more highly concentrated, the returning "echo" much more intense and the resolution much more exact than in the lower frequencies.

At the start of the war nearly all the great nations had a certain amount of early, long-wave radar, but what kept the Allies so far ahead of their enemies was the development of microwave radar, the practicability of which was largely based on the British-developed cavity magnetron, brought over in the summer of 1940 to NDRC's "Microwave Radar Committee," of which Alfred L. Loomis was chairman. A few weeks after the British visit, this committee blossomed out into the Radiation Laboratory, and Dr. Lee A. DuBridge, Professor of Physics and Dean of the Faculty at the University of Rochester, was selected director.

¶ Radar Rule—This is the general background to be considered in connection with the development of almost any more than 100 types of radar equipment used during the war, many of which can perform highly useful and in some cases almost revolutionary peacetime functions. —NAVTRACOS



Laboratory Warriors: Three of the men who played important parts in solving and refining the "physicists' war" are shown above at the Radiation Laboratory at MIT. E. G. Bowen (seated), member of a British scientific mission which brought the first cavity magnetron, heart of many new radar developments, to the laboratory in 1940, is being shown an American built copy by Radiation Lab Director Lee A. DuBridge, left, and Assistant Director I. I. Rabi, Nobel Prize winner.

# Marguette Aircraft Wipers



## For Clear Vision

¶ Pilots and co-pilots of our Army and Navy aircraft, as well as our airlines, fly behind Marguette Aircraft Wipers. Today these wipers are considered standard equipment. Their contribution toward safe flying is acknowledged.

While automobiles have had windshield wipers for years—and who would think of driving without them?—the advent of aircraft wipers has been recent.

It was first thought wipers could not be applied to aircraft. Many airplane windshields are

curved; suspends are terrible as compared to the automobile, and for many other reasons, plenty of doubt existed.

Now that doubt has been eliminated. Our wipers, both hydraulic and electric types, prove every day their value in hazardous weather. They are in use all over the world.

These wipers, initiated prior to the war at the request of our commercial airlines, will again be available for commercial installations after the war.

On Army Aircraft	On Airlines
C-45 C-87 A-34	S-17
C-47 A-20 A-38	S-24
C-53 A-34	S-27
C-54 A-34	S-12
C-54 A-38 S-25	S-19
C-48 A-29 S-26	

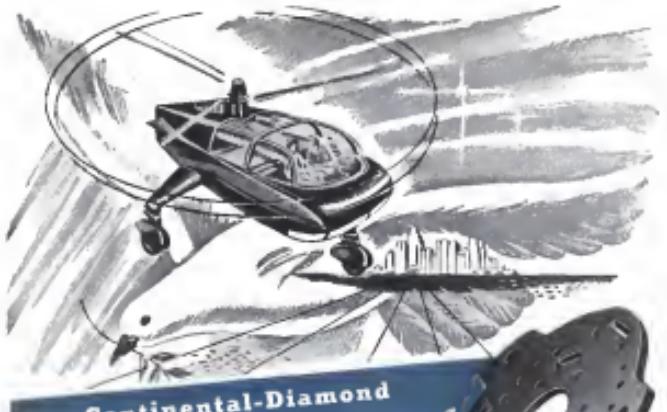
  

On Navy Aircraft	On Airlines
PBM PV R5C JTF	All American Aviation Inc.
PBY PWF R4D JFM	American Airlines, Inc.
PBY R5C R5D PFT	American Airlines Airlines, Inc.
PBY R5C R5D PFT	Boeing Airplane Co.
PBY R5C R5D PFT	Chicago and Southern Air Lines, Inc.
PBY R5C R5D PFT	Colonial Airlines, Inc.
PBY R5C R5D PFT	Comair Air Lines, Inc.
PBY R5C R5D PFT	Delta Air Lines, Inc.
PBY R5C R5D PFT	Eastern Air Lines, Inc.
PBY R5C R5D PFT	Emic, Inc.
PBY R5C R5D PFT	Hawaiian Airlines Company

Island Air Lines, Inc.  
All-City Air Lines, Inc.  
Midwest Airlines, Inc.  
Northeast Airlines, Inc.  
Northwest Airlines, Inc.  
Pan American Airways, Inc.  
Pan American World Airways, Inc.  
Transoceanic & Western Air, Inc.  
United Air Lines, Inc.  
Western Air Lines, Inc.

# The Marguette METAL PRODUCTS CO.

CLEVELAND 16, OHIO  
Manufacturers of HYDRAULIC AND ELECTRIC WINDSHIELD WIPERS FOR AIRCRAFT  
HYDRAULIC STEERERS FOR AIRCRAFT AIRPLANES • BOLTED BEARING THRUST SPHERICAL BEARINGS  
AIR COMPRESSORS • PRECISION PARTS AND ASSEMBLIES



## Continental-Diamond Engineered Non-Metallic Materials

The DILECTO machined part illustrated is a motor fan for aircraft laminated parts. It must not only have high dielectric properties, it must also be strong enough to support the centrifugal force generated by rotation from vibration and impact shock. Dielectric properties must be stable regardless of temperature, humidity or dryness. Ready to hand is made from a material which can meet all necessary properties. DILECTO met all these requirements with a wide margin of safety.



There are many grades of DILECTO. Each developed to meet specific electrical, mechanical, chemical or thermal problems. Special grades can be developed to meet unusual problems. DILECTO is also available in combination with Diamond Fibre to still further enlarge its sphere of usefulness. This C-D NON-METALLIC may be the answer to your "What Material?" problem, in your present and future products, whether used in the air, on land or sea.

### C-D PRODUCTS

**MICARON**—Tolted-Up Micro  
Electrical Insulation.

**Standard and Special Forms**  
Available in Standard Sheets,  
Rods and Tubes, and Parts  
Fabricated, Formed, or  
Molded to Specifications.

#### Descriptive Literature

Tollton C-D gives Comprehensive Data on all C-D Products. Individual Catalogs are also Available.  
GILBERT OFFICES  
NEW YORK 17 • CLEVELAND 11 • CHICAGO 11  
SPARTANBURG 2 • O-HILO OFFICES: DENTON, TEXAS  
•  
WEST COAST REPRESENTATIVES  
MAHWOOD LTD., SAN FRANCISCO 3  
•  
IN CANADA  
BRANDON-STATING CO. OF CANADA LTD., TORONTO 4

**Continental-Diamond FIBRE COMPANY**

Established 1915. Manufacturer of Laminated Plastics since 1915—NEWARK 4 • DELAWARE

## PRIVATE FLYING

### Potential Lightplane Sale Bar Seen In Financing Limitations

Federal Reserve Board regulation prohibits application of trade-in allowance toward down payment on planes but allows it for automobiles; forthcoming availability of personal aircraft centres industry attention on needed revisions.

By WILLIAM KROGER

With many of the production problems overcome, and new aircraft well underway, lightplane manufacturers are beginning to express concern over another potential bar to widespread sales. Regulation W of the Federal Reserve Board, which controls consumer credit.

The regulation was originally issued in August 1942, but amended the following Spring, when the war effort was shifting into the civilian market. Under it, purchase of an airplane of less than \$1,000—the useful load must be financed with one-third of the price down, the balance payable in not more than 32 months. A trade-in cannot be applied toward the down payment.

**Measuring.**—Accordingly, the value of the trade-in is first deducted from the purchase price, and the down payment is one-third of the remainder. In practice, this means the buyer is paying considerably more than one-third down. For example, if the price of an airplane is \$3,000, and the trade-in allowance is \$1,000, the down payment must be \$1,000, one-third of \$1,200. But actually, the purchaser, by putting on his old plane, is paying \$1,300 down.

By contrast, trade-in allowances of automobiles can be part of the down payment under Regulation W. If that were true for aircraft, the \$800 allowance used in the example above would be ample to cover the down payment. Another discrepancy in Regulation W is that maximum time for payment for automobiles is 18 months, as against 32 for aircraft.

While the war was in progress, little attention was paid to Regulation W, due to the lack of planes to sell. Now, however, the forthcoming availability of new planes is focusing attention on the trade-in aspect.

that Regulation W will have a reducing effect.

Federal Reserve Board maintains it does not want to stop the sale of any commodity, and in the past has moved promptly when its regulations seemed to point in that direction. Last July, it exempted from Regulation W aircraft above the 1,000-lb. useful load classification to pave the way for sale of transport planes and the larger types of family aircraft.

Federal Reserve sources unofficially indicate that all aircraft may be removed from Regulation W control after the first of the year.

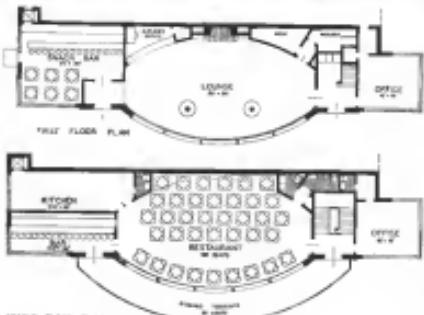
**Blessing, Blue.**—The entire financing problem for lightplane purchasers is hairy. Manufacturers in general are devolving themselves from it, and leaving it up to their distributors and dealers, though furnishing information on the planes available. Similarly,



#### CUSTOMER APPEAL:

For customers, ease of entrance, and other customer appeal requirements locking in many of today's personal planes, the experimental Pipistrel Skyslope, whose production future is still cloudy, offers some forceful design pointers. Above: Wide doors on both sides permit entrance from ground level without undue constraint. Below: Batteries panel with easy-to-read automobile type dials, starter button, turn-table hook attached to wheel, has eye-appeal and makes the plane easier to fly.





Architect's drawing and floor plans of Robinson operations building to be built at Teterboro Airport.

many producers feel the trade-in problem is one for distributor dealers determination.

Complicating the picture is the lack of standard valuation on used aircraft—the reason given by the Federal Reserve Board for its original stand on the use of trade-in allowances for down payments. There is one "blue book" guide to aircraft values, but the extent of the use is questionable.

An additional factor is that while there is broad agreement on the "one-third down, balance in 12 months" formula for new aircraft.

## Sales Shape

Indications that the first post-war market for light aircraft and racing powerboats—both areas of trade—increase are growing stronger. First Taylorcraft was recently delivered to the Dayton, Ohio, Airplane Sales Corp., while the first J-3C Piper Club, for use as a demonstrator, has been acquired by the Hetherton Flying Service at Columbus, 8 C.

craft, the down payment runs considerably higher for used aircraft, often up to 50 percent. One fact responsible for this is that all chattel mortgages carry credit insurance, and insurance on the principal sum in a used aircraft purchase generally becomes prohibitive when the amount of the loan exceeds 50 percent of the purchase price.

## Top Canadian Air Club Buys 14 Tiger Moths

The Toronto Flying Club, one of the Dominion's largest private flying organizations before the war, has turned to purchase of surplus military planes as a solution to its equipment problem despite the looming availability of new lightplanes. Latest purchase by the club was of 14 de Havilland Tiger Moths.

Future plans of the group call for purchase of three Douglas Cessna Cruisers, twin-engine transports. Purchases are made through the Royal Canadian Flying Clubs Association which buys from the

government's War Assets Corporation and resells to the 12 Canadian clubs after getting the ships into flying condition. Price is cost plus overhead charges.

## Field Expanding As N. Y. "Portal"

Robinson Aviation moves to Teterboro airport; full private flying facilities planned for metropolitan-based pilots.

A major move in expanding the Bendix Airport, Teterboro, N. J., into a personal aviation "portal" for New York City, took shape last week as Robinson Aviation, Inc., revealed plans for a private flying base there with terminal facilities that touch every need of the individual pilot and non-scheduled operation.

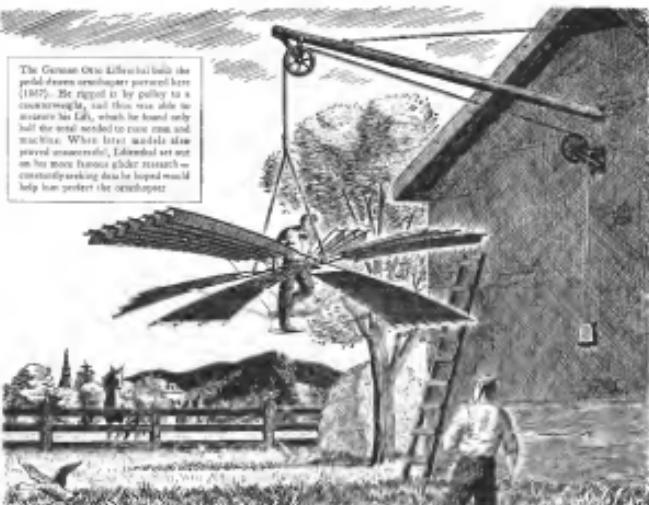
According to C. S. Robinson, president, the entire operations of the company, incorporated under his name, will be centered in the field where the former Fokker Aircraft factory has been leased for maintenance and storage space.

**Varied Features**—A modern operations building will highlight new construction planned. Included will be terminal facilities for the recently formed Robinson airline; providing non-stop flights to New York service, accommodations for other private plane pilots and their passengers, a pilot lounge for visiting pilots and those based at the field.

Special attention will be paid the needs of many businessmen expected to use aircraft as a fast, convenient means of transportation to Gotham appointments. With the heart of New York City only a half hour from the field, by car through the Lincoln Tunnel, a standby taxi service will be maintained by agreement with a local company.

Storage and telephone facilities will be made available for the flying businesses at the terminal while a restaurant and snack bar will top off the conveniences. Limited service will start in November prior to full operation upon completion of the construction plans.

**Route Considerations**—The airport is located so that planes flying from any section of the country, except one east from Long Island, can reach it without passing over the "humpback" area of New York and without plotting cir-



## In a barnyard, LILIENTHAL LEARNED HOW TO MEASURE THE LIFT OF WINGS

In aviation there is a battle not yet finished. It is man's struggle to increase the useful force of air around a wing, and to reduce the friction of air against a plane's surfaces. It is the continuing battle of Lift versus Drag.

During the past twenty years, the veteran in this battle have been many, a notable number scored by Northrop. Toward Drag-reduction, for example, Northrop pioneered the monoplane fuselage in 1927. Multifuseliers, internally-braced wings and wing flaps for monoplanes came from Northrop in 1929. And, in 1932, Northrop introduced the first split

flaps to increase lift at take-offs and landings.

The years 1935 to 1941 brought other Northrop advancements: The first double-split dive flap . . . bullet-welding of magnesium for lighter, smoother construction . . . the first retractable ailerons. And the first successful all-wing airplane, the Northrop Flying Wing, which housed everything inside the wing.

What next in the battle of Lift versus Drag? Many of the answers will come from Northrop, from plane already set to create both more efficient propulsion and planes of still more advanced design. Northrop Aircraft, Inc., Northrop Field, Hawthorne, Calif.



# NORTHROP

Creators and Builders of the *Black Widow* P-61 Night Fighter and the *Flying Wing*



**Air Delivery At Deadwood Dam** Johnson Flying Service of Missoula, Mont., the only bidder, again has been awarded the government contract to make twice-a-month air deliveries of food and mail to snowbound Ole Overbeke, superintendent of Deadwood Dam, Idaho (left). In previous years Penn Stoker (right), known as a "mercy flier" in the Northwest, made the deliveries for Johnson, but he has been transferred, and Bill Yaley and Bob Fogg, other Johnson pilots, are expected to make the delivery runs this year.

curious course. Located inland, it is less affected by sea fog and is free of the smoke haze prevalent over the metropolis.

Part of the leased plant space will also be used for the manufacture of Robinson Vihraeck mounts and other accessories.

Object of the new effort is to "use it to that those people who take up private flying and buy airplanes will remain permanent customers of aviation and will last, as in the past, give up flying after one or two years due to inadequate types of service available."

## Snowbound Post Served By Plane

Ole Overbeke, superintendent of Deadwood Dam, 133 miles northeast of Boise, Idaho, near the center of the Cascade Mountains' most primitive area, will get his groceries and mail by air again this winter.

Award of the air delivery contract to Johnson Flying Service, of Missoula, Mont., the only bidder, and the previous contractor, has been announced by the Department of Interior Bureau of Reclamation.

**Yaled**—Overbeke and his wife are isolated at the reservoir throughout the winter except for the semi-monthly plane deliveries of mail and food, and his short-wave radio communication with other Bureau of Reclamation stations.

The aerial delivery is no easy

job, since it calls for setting the plane down on a flat island at the edge of the lake or with skis on the lake itself, when it is frozen. In past years, Penn Stoker, known as a "mercy flier" in the Northwest, handled the contract for Johnson, and sometimes dropped food and mail by parachute when throwing conditions made ski landing impossible.

This year Bill Yaley and Bob Fogg, Johnson pilots, will perform the delivery service. Stoker has been transferred. Before plane

## Storm Recovery

Early hours after most of the private planes in the Mount Rainier, Fla., area were destroyed in a violent Hurricane (see related news item) several small aircraft, where havens had been offered, flight training was resumed at Chapman Field, Key West-Riddle base.

Two planes which had suffered minor damage, and survived the storm, were being used. First replacement planes were flown into the field four days after the Sept. 15 disaster and others are enroute.

**Lane**—Entry-Riddle reported its pilot plane had flown 12 company, 28 privately owned, and 42 government surplus planes to the Richmond airbase where hundreds of light-planes were destroyed in the Hurricane and subsequent storm.

The aerial delivery is no easy

service was started. Overbeke used to get his supplies by dog team delivery. He is usually snowbound at the reservoir for about seven months, and has been at the dam 12 months. He is stationed there to keep the gates open for the 140-foot high dam from freezing, and in the summer regulates the flow of water from the reservoir, for irrigation.

## Kentucky Aviation Shaken By Dispute

A complete change in the aeronautics set up in Kentucky has resulted from a dispute between Gov. Simon B. Walmsley and the State Aeronautics Commission, over funds for promotion of aviation.

The aeronautics budget for 1945-46, now \$100,000, secretary, and Carl Ulrich, director of aeronautics, charged they received only evasion and vagas promises from the governor in response to urging that he grant \$30,000 from his emergency fund. In answer, Walmsley fired the entire commission. Ulrich, an opponent of the commission, resigned.

**Airport Key**—Focal point of dissension is the airport situation in Kentucky. With only 23 airports in the state, as of the first of this year—seven of which were used by the Army, Navy, or GAA—Kentucky ranked last in the nation from standpoint of existing facilities per square mile population.

Ulrich asserted he wanted the emergency funds to plan increased airports, and claimed the failure to get them gave the commission "little hope of getting federal funds for state aviation promotion." In rebuttal, the governor pointed out that federal funds are not yet available and that in addition he had no legal authority to grant the money requested.

## Goodyear Club Grows

Goodyear Aircraft Corp.'s "Wingfoot Flyer's Club" now comprises all but two of the top company executives and department heads, with D. L. C. Hatch, chief of the hospital staff, recently becoming the 37th member to solo. Eight others are taking flight instruction.

The club, composed of Goodyear personnel, owns six planes: Cob, Lucentine, Taylorthrift, Europa, Starman 105 and a Fairchild. A new hangar for the planes is nearing completion at the Akron airport.

light...  
powerful...  
alert...

featherweight radio receiver ...

**AIRADIO**  
AIRPORT RADIO COMMUNICATIONS

**AIRADIO** brings world-wide design and quality to postwar aviation with a complete two-way radio system weighing less than 11 pounds—including receiver, transmitter and power supply. **AIRADIO** brings you more power per radio ounce for radio range, weather, interphone and standard broadcast reception. **AIRADIO** brings you uncompromising quality in this compact, easily operated postwar radio for private plane owners.

Write today for your demonstration of the lightest and dependable two-way aircraft radios...

# First New Escoupe Delivered; Performance Boosts Announced

Immediate sales seem limited only by production as orders pour in; top speed raised to 122 mph, with 75-hp. engine; footbrake installation, electric starter increase ground handling ease.

The first post-war Escoupe, complete with 75-hp engine, electric starter, footbrake, improved insulation, and other modifications, but still essentially the same airplane as its pre-war sportscar sister ship, rolled from the assembly line at Rivesdale, Md., last week.

It was down by Fulton M. Moore, Chicago manager for Parks Aircraft Sales & Service, to Chicago for delivery to Marshall Field & Co., where it will be displayed in the store's new aviation department.

**Speed Hikes**—New specifications announced for the Escoupe, show that the increase of 30-hp. in the powerplant has increased the cruising speed from the pre-war 105 to 110 mph and the top speed from the pre-war 117 to 122 mph.

Rate of climb on the new plane is 735 ft. per minute as against 700 ft. on the pre-war model, and service ceiling has been boosted to 14,000 from 13,800 ft.

Useful load at now quoted at 510 lbs. as opposed to 505 in the

pre-war model, due to the extra weight of engine, starter and generator, so that gross weight remains the same as pre-war, 1,200 lbs. Cruising range drops 34 miles, to an even 500 miles, also due presumably to the extra weight. But since it is generally agreed that a 500 mile trip is as much as most lightplane flyers will want to undertake without a stop, this change is not surprising.

**Ground Handling**—The footbrake installation, in approximately the same location on the cockpit floor as a footbrake would be in a car, is expected to provide additional ease in ground handling. And, it is in addition to the hand parking brake which remains just below the throttle at the bottom of the instrument panel, as on the pre-war plane.

The tricycle landing gear with steerable nosewheel, springless characteristics, excellent visibility and all-metal structure of the pre-war plane remain unchanged.

One other change in the Escoupe is a redesign of the canopy, to re-

duce visibility but to make it more efficient in operation and provide more protection against the sun by use of tinted transparent panels. Three sliding panels are now used instead of two in the canopy opening.

**Sale**—**Benton**—With Escoupe orders accompanied by cash payments already reportedly topping the 10,000 mark, and with department stores under and advertising campaigns running in New York and Chicago, plus a general organization patterned after automobile merchandising lines, the Escoupe's sales for many months to come may well be limited only by the quantities that can be produced.

## Military Schools Adopt Air Courses

Kansas academy joins CAP in novel air corps training plane; new institution secures civil flying.

Emphasis on aviation education in primary and secondary schools has picked up impetus in the new academic year, with some already placed on military aviation courses, as well as civilian flight training.

An example of the former is St. John's Military Academy, Salina, Kan., which has joined the Civil Air Patrol and launched aviation training under the direction of members of the AAP. Lt. Col. J. Howard Wilson, Kansas wing commander of CAP, and Col. R. L. Clem, superintendent of the military school, announced the cadet corps had been formed into a CAP cadet squadron, with 86 of the school's 110 students eligible to participate.

**Concept Change**—The new program means a change in the activity of the school from an infantry school to an air corps academy. Maj. Fred Heppner, director of ground training, Brooks Mill Army Base, Salina, has been named coordinator of education at St. John's.

On the civilian planes of air education, a departure from previous forms of aviation teaching is apparent in the establishment of the Atlantic Air Academy, Key West, Fla. There that, too, is a military school, with the students wearing uniforms adapted from those of the AAP, it will specialize in civil aviation.

Although a college preparatory school, the Academy will con-

centrate on aeronautical subjects in all four years. In the first year, a student will study, among other subjects, air geography, in the second year, courses will include study of the civil air regulations Meteorology and various phases of aerospace science, to be taught in the upper grades.

The new school got off to a "flying start" with students being flown by airline from New York City.

## Shoe Firm's Plane Saves Money, Time

Plans to buy a large plane in addition to the Cessna Beloit five-passenger, twin-engine plane recently purchased, are being studied by the Freeman Shoe Corp., Beloit, Wis., as a result of time savings accomplished by the plane in making executive trips.

R. E. Freeman, company president, reported that, heretofore, company executives had been unable to make many extended trips because of conflicts with dealers or salesmen because of the travel time consumed.

**Usage Proof**—Since the purchase of the Cessna, from military surplus, and its conversion as an executive plane, the time saving factor provided has been beyond expectation.

Addition of a second plane is expected to make it possible to increase still further the range and speed of the company's executive travel to marketing points throughout the country.

The Freeman executive plane experience is indicative of one of the most wide-open markets for non-commercial transport planes in the immediate post-war period. Business affinity of privately-owned or economy-minded planes is expected to make them plentiful soon after such planes are back on the market in larger quantities.

**Mountain AAF Base Opening To Civilians**

Mile-high Bishop, Calif., Army airbase soon may be opened to private flyers and give opportunities from San Francisco to San Diego and areas to west of the Sierra mountain and fishing grounds of the High Sierras range.

Rainways are hard and long, built for high-altitude emergency landings of heavy bombers.

**Cabs Allowed**—Army objectives



"Shoe" Plane: A five-place Cessna Beloit, purchased by the Freeman Shoe Corp., Beloit, Wis., from military surplus, has been converted for civilian commercial executive use, and is proving a time and money saver in the company, according to R. E. Freeman, president. Left to right: Fred Hinschfelder, (pilot), A. W. Cudwell, R. E. Freeman, R. T. Cory and R. E. Freeman, company executives.

## CPTP Resumption In Balance Now

Resumption of the CAA's Civilian Pilot Training Program will depend on the fate of a request for a \$3,250,000 appropriation to cover the program's costs during the first six months of 1946. The request was submitted last week to the Bureau of the Budget.

As outlined, the post-war CPTP would today consist of the pre-war pilot trainees which the Federal government financed, 1,000 hours of flight. Students recruited through educational institutions, with the actual flight training provided by aircraft base operators under government contracts.

**Possible If**—If the program is approved by Congress it is expected to make possible the training up to private pilot status, of approximately 15,000 student pilots.

The plan is set up under the same pre-war arrangement of a Federal grant of 75 percent of the flight training cost, with the remaining 25 percent being paid by the individual student and the spending educational institution.

The request is directed to the Comptroller of the Treasury, Congress authorizing for the program operates June 30, 1946.

CAA officials are eager to get the program reinstated as soon as possible, since it is believed that the program will have its best opportunity for continuing, if it is a going concern at the time the question of its re-authorization comes up before Congress.

**Support**—Aviation industry interests and backers of air power for national defense are expected to give full support to the reinstatement of the program before Congress, in view of the need of CPTP-trainees and later War Training Service trainees in the AAP and naval aviation.



**Key Officials:** Three key officials of the Engineering & Research Corp., Rivesdale, Md., start Fulton (Sherer) Moore, senior manager for Parks Aircraft Sales & Service, Escoupe midwestern distributor, flew the plane to deliver it to Marshall Field & Co., for display in the giant Chicago department store. Left to right: George Ryan, newly appointed vice-president in charge of sales; Moore (in plane); L. A. Wells, Ercoupe president, and Fred E. Wenzl, vice-president in charge of engineering.



# Briefing

For Private Flyers and Non-Scheduled Aviation

**Aerial Basket** Possibilities for emergency landing stations or "backyard" landings for light-planes are seen in the AAF's Route cable system for "landing" Greenhester bases plane, shown here in a Wright Field demonstration.

Hancock College of Aeronautics at Santa Maria, Calif., has consolidated with the University of Southern California as a department of the University. Capt. Allan Hancock, who founded the school 17 years ago, will continue as director of the department. The Hancock school, one of the AT&T group, trained more than 8,000 aviators cadets during the war period (including eight of the Doolittle Tokyo raiders). The first of such consolidations to be reported among the larger flight training schools, the merger indicates a new way for the larger universities which have not yet developed big aviation programs to catch up, partly at least, with schools like Purdue University which have been developing flight training programs for years along with other integrated courses.

**WHICH WAY, SHERIFF?**—A light plane figured in the capture of a couple of auto thieves recently, near Clayton, N. M. John Wheately, of Clayton, took off in his Taylorcraft with the sheriff, to pursue the car thieves who had shot an hour's start. Wheately soon passed the speeder but maintained altitude to avoid suspicion and flew several miles ahead along the road, and landed on the open range. The rest of the story follows the orthodox pattern: the sheriff called the two thieves on the highway and took them into custody.

**ROGUE AIR COUNTRY CLUB**—Aviation Country Club, near Hicksville, L. I., one of the first and most successful amateur sport centers in this country, which has been closed during the winter, is preparing to reopen. Howard Gundrey has been named as manager of the country club's airfield. Gundrey was formerly secretary of Gilman Aviation which operated the field pre-war. Founded in 1933, the Long Island club was one of the first aviation organizations which offered its members such facilities as a swimming pool, tennis courts, dining room, lounge, and invited hotel room accommodations.

**FLYING CLUB**—Piper Aircraft Corp. is studying possibilities of starting Flying Clubs among private pilots throughout the country. Members would agree to furnish planes from the Lockheed, Prima, plant at various distribution points, in exchange for the cross-country flights and experience gained, and expense paid. Membership would be limited to pilots with sufficient experience to be capable of handling the planes under all ordinary conditions. The plan would be an outgrowth of, and supplementary to, the Employees Flying Clubs now operated by the Piper company.

**NOICE MUFFLER**—Reduction of noise factor in private flying, admittedly one of the most serious drawbacks to greater public acceptance, has been promised to be investigated by the National Advisory Committee for Aeronautics as a result of the test which Grover Loening, NACA consultant, is making among personal plane manufacturers. Loening, flying a Stinson Voyager, has already visited many of the plants, and will prepare a special report on his recommendations for NACA technical studies to improve personal aircraft, so his return to Washington.

**FIVE SEASERS**—Reedell Aviation Corp., hopes to have its first five "Seasers" (revised model) out on display among its distributors and dealers sometime this fall. But it does not plan to make any flights for customers until next spring. Meanwhile, the company is looking for a seven larger production than it had first scheduled as a result of the large number of orders from individual customers and from dealers and distributors. The standard "Seaser" with 150-hp. engine and with wider cabin providing more room and room for its back-seat passengers, will still sell for below \$14,000 as it was originally announced. The actual price probably will be about \$3,995.

## Wichita Airport Blaze

Following closely after the Florida naval airbase fire which destroyed many private planes, a fire at the municipal airport han-

gar at Wichita, Kansas, last week destroyed 30 planes and the hangar, for an estimated damage total of \$500,000. Twenty-five of the planes were privately owned.

Alexander McFarlane

## TRANSPORT

### INSTRUMENT FLIGHT TREND

## Extra Airports Seen Necessity At All Major Airline Terminals

Industry, CAA officials assert rising proportion of instrument approaches will force nationwide addition of new "bad weather" fields; local effectiveness of revolutionary all-weather techniques believed dependent upon location.

By ELAINE STURRLEFIELD

Continuously rising proportion of instrument approaches probably will require extra airports for use during bad weather at all major terminals, in opinion of some CAA and industry officials.

Instrument approach and various degrees of stacking increased rapidly in 1948-49, due to military

operations, more pilots learning the technique, and more airports in use. Rapid expansion, particularly in the transport category, will more than offset the decline in military flight.

► **TRELL ADDS:** All the new aids to traffic coordination, including Civil Aeronautics Administra-

### Instrument Approach And Delay Time

Number of instrument approaches and total delay time is July for 33 domestic traffic control centers, and two in Alaska, are shown on the following table from CAA's Air Traffic Control Division. Each center covers a considerable area. The Washington center, for example,

includes Baltimore, Md., Richmond, and Roanoke, Va., and other points.

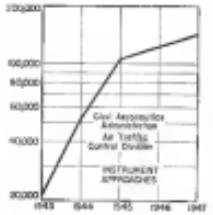
Rights in bad weather, however, know in advance that other trips are stacked ahead of them at destination, so may spend their delay time on the ground before the start. If that were accounted for, the per-

haps would be five to 10 times worse than it appears here. Also, July has better than average weather. These figures do not reflect CAA's new instrument approach system, which they say is used only by the military, the airlines not as yet having their intricate equipment.

more would be five to 10 times worse than it appears here. Also, July has better than average weather. These figures do not reflect CAA's new instrument approach system, which they say is used only by the military, the airlines not as yet having their intricate equipment.

TOTAL DELAY TIME

AIRPORT	INSTRUMENT APPROACHES			TOTAL DELAY TIME					
	Airline	Amy	Navy	Non-scheduled	Airline	Amy	Navy	Non-scheduled	TOTAL
Albuquerque	32	81	15	3	65	29	196	12	93
Anchorage	10	26	18	4	114	21	236	15	146
Asuncion	46	30	29	2	118	45	36	6	261
Baltimore	544	154	12	1	345	83	37	99	915
Bangor	15	15	15	1	22	22	22	1	66
Chicago	149	61	9	0	259	186	239	13	532
Cleveland	126	58	18	6	303	21	83	60	565
Dallas	362	37	15	0	264	345	100	10	728
Denver	44	18	9	0	73	28	28	1	127
Detroit	90	11	1	1	163	39	118	93	392
Florida	55	56	3	6	84	15	117	80	122
Fort Worth	102	35	8	2	213	100	12	10	243
Garden City	0	5	0	0	0	0	0	0	5
Jacksonville	46	55	18	3	174	30	228	64	383
Kansas City	56	33	6	0	89	80	66	0	65
Los Angeles	388	294	254	1	813	1073	12	10	4226
Montgomery	140	20	2	0	209	45	52	0	117
Minneapolis	4	2	0	0	5	0	0	0	95
Minneapolis	65	27	6	0	96	864	113	99	946
New York	156	16	15	2	346	330	138	10	1520
Orlando	202	51	2	0	229	10	10	10	232
Pittsburgh	104	36	5	1	246	412	66	111	422
St. Louis	25	20	4	1	53	39	39	0	131
San Antonio	11	197	17	0	394	117	34	139	476
Seattle	162	199	20	0	264	41	154	22	426
St. Paul	588	114	238	0	425	2094	826	12	422
Washington	TOTAL	360	1323	954	97	634	3800	18945	36181



**Instrument Increases:** This curve, produced from CAA data, shows the increase in number of instrument approaches at fields within the U. S., beginning in 1943. From the present to the end of 1947, the curve is based on estimates. It includes military scheduled and non-scheduled flights, current in civil aviation, will more than offset the decline in military operations, thus the rate continues through the indefinite future, though at a more moderate rate than in 1943-1944.

observation, and probably will serve as a traffic laboratory.

**Schedule Ceiling**—Main result of stacking is low schedule performance and loss of patrons. It puts a ceiling on reliability of air services. It is believed that improved aids seen to be in use, plus extra airports, will result in nearly 100 percent schedule performance. The cost of capital of the airports, and the reduction of surface transit between them, is not an attractive picture at this time.

Bad weather fields should not be "alternate," feels, say CAA spokesmen. These should be used for changing the destination of planes in flight.

Not only the weather but current trends back to conveniencescheduling (the plane passengers who nearly all want to leave, on New York-Chicago, for example, at 8 p.m.) will aggravate stacking. If schedules could be accelerated all around the clock, the problem would be much easier—but they can't. Contributing also to terminal jams will be the faster planes of a few major airlines.

**Plane Size**—One partial remedy not much discussed thus far is big airplanes doubling the size of the airplanes, for example, would halve the number of traffic movements (departures figure impor-

tant in total delays). Thus the movement of frequent trips with smaller planes may have to be re-evaluated as money rates.

The experts get a gleam in their eye when the last word is spoken. They want traffic controllers to be able to use those moving and departing craft. In the "now," pilots can report their positions only with reference to the various electronic fixes they pass, and that's not good enough. Location with radio compass is not fast enough for approach procedure. Technicians say they probably soon can give the towers equipment with which they can see a 10-mile radius.

Changes that are airborne radar will soon only a frontal segment, for a while, possibly also down, for true altitude. Universal coverage seems further in the future, due to weight and cost. Some of the bolded observers believe that with adequate radar, airplanes can go anywhere, without much traffic control, but these are responsible for safety are more cautious.

**Time Saver**—Radio VHF communications will be a big time-saver too. Much repetition of messages on low frequency, due to static, wastes time. Time used up by persons working in the control procedure is what stacks the planes.

The automatic teletype for ground line communication can take multiple simultaneous messages, and many times faster than human hands and voices. It will eliminate most of the delays that have bottlenecked surface

communications on heavy routes. Automatic position reporting probably can be accomplished in the early future. Electronic fixes can be spaced all along a route. On the other hand, there must be transmission as generated by a code for each position, which is automatically sent to the base and automatically posted. Such a gadget also can give a speed reading, and it can make advance speed calculations on past averages.

**New Hope**—With equipment now is sight, CAA hopes that 100 to 150 airplanes can be put over a section of route per hour—which would be four or five times better than now—and it hopes for instrument approaches at the rate of one per minute, instead of the present national average of about 14 minutes.

## Industry Meetings On Air Policy Set

Unsettled points of Chicago policy to get manufacturers' confidence with emphasis on airworthiness requirements.

Plans are being made for industry conferences in Washington at which representatives of various phases of aviation will discuss matters of basic U. S. air policy left unassigned at last year's International Civil Aviation Conference at Chicago, and dealing particularly with such technical items as airworthiness requirements.

U. S. representatives on the airworthiness requirements subsection of the Air Transport Committee of the Provisional International Civil Aviation Organization, now meeting at Montreal, is Charles F. Dyer, of Civil Aeronautics Administration's flight engineering division. The first subcommittee meeting on Chicago document dealing with technical items G, airworthiness requirements, probably will be held at Montreal late this year or early next.

**Date Proposal**—In the meantime, there is hope that the first conference on U. S. policy may be held about Nov. 1, with representatives of the Air Transport Association, Aircraft Industries Association, Aircraft Owners and Pilots Association, Air Line Pilots Association, Army and Navy, CAA, and Civil Aeronautics Board present.

The real work of ICAO began last week in Montreal, as its two

main technical committees, air transport and air navigation, opened meetings to draw up international standards necessary for rapid development and efficient operation of world air transportation.

Priority of their tasks was emphasized by Dr. Edward P. Warner, president of PICAON International Council and former vice-chairman of CAB, in welcoming the delegates at first meetings of the committees.

Conversion from military to civil aviation is taking place, he pointed out, and if standard regulations for international flying are not agreed as non-standard action will be taken to meet the need.

As the two committees begin discussions, preparations were made for initial meetings of the various subcommittees which will study and recommend a special subset of overall problems.

**Officials**—Chairman of the member Air Navigation Committee is A. R. McCosh, Canadian delegate to the Interim Council. The Air Transport Committee of 14 members is headed by Dr. E. H. Copas Van Hasselt, delegate of The Netherlands.

The U. S. is represented in the navigation unit by Commander Paul Smith, while Col. Gerald Murphy, Coast Guard delegate, is also on the transport committee.

Other states which sent delegates to the Air Navigation Committee include Belgium, France, Greece, Italy, New Zealand, United Kingdom, Sweden, Switzerland, Turkey, Canada, Spain and Brazil. The same nations are represented on the Air Transport Committee, with the addition of Switzerland.

## Examiner Rebounds Caribbean, National

Holding National Airlines and Caribbean-American Airlines, almost equally responsible for military violation of the Civil Aeronautics Act, a CAB examiner has recommended denial of acquisition of control of Caribbean-American, in an unexpected move, suggested an investigation of the carrier to determine whether it is fit, willing, and able to furnish the services for which it is certified.

In a sharp report adversely critical of the transaction, Examiner Ferdinand D. Moran found that National "had held and exercised" physical control of Caribbean-American since April 10, 1945, the date of an acquisition letter



## PRESIDENTIAL GIFT TO DE GAULLE

This is the C-45 used with the Cross of Lorraine and the French colors that President Truman recently presented to General de Gaulle. Pictured on Washington National Airport, the French Army plane has made two trips between France and the U. S. with high French officials. De Gaulle himself has not used it. On his visit to Washington, the general flew as Aero York presented to him by the British Government, August, at his personal plane.

## Services Changed By Seven Airlines

New service changes, most of them effective Oct. 1, have been reported to the Civil Aeronautics Board by the airlines, as follows:

**American**—Added two round trip daily between New York and Los Angeles via Detroit, Chicago and Oklahoma City, added nonstop daily flights between New York and Chicago, Tulsa and El Paso, and Brandi (Va.) and Lynchburg, and resumed service at Douglas, Ariz.

**Brandi**—Added one round trip daily between Houston and Galveston on its extension of AM 18 from Houston to Dallas.

**Continental**—Added one round trip daily between Denver and Kansas City via Hutchinson, Kas., one round trip daily between Denver and Tulsa via Amarillo, Tex., and resumed service at La Junta, Colo., and Greeley, Colo., Kas.

**Northwest**—Added one round trip daily between New York and Boston, bringing the total to 15, and deleted one round trip daily between Boston and Portland, and Bangor and Presque Isle, Maine.

**Mid-Continent**—Suspended service at Huron, S. D., due to airport conditions.

**TWA**—Added a nonstop daily flight between Detroit and St. Louis.

**Fair American**—Temporarily suspended its weekly fight between San Juan and Port of Spain, eliminated its weekly round trip between San Juan and Paracouba, and suspended service at Port a Pitre, Guadalupe, and Port de France, Martinique.

# Seven U. S. Lines Get C-54's As Surplus Agency Allots 40

Record domestic apportionment of the big transports sends dozen to PCA while Netherlands government gets 14; only other foreign award is to Swedish line.

Twenty-two Douglas C-54's, including the largest single group yet to go to a U. S. airline, were allotted to domestic airlines last week by the Surplus Property Administration in the second allocation of this type of plane.

**Domestic**—As a sequel to the 26 C-54's previously allocated to the three U. S. international carriers, Pan American Airways, (8), Transoceanic, and Western Air, (8), and American, (10), the agency, (4), the latest disposition was as follows: C-54 banes—15 to Pan-Am-Virgin-Central Airlines, C-54B's—one each to American, TWA, United Air Lines and Western Air Lines, and one each to Delta Air Lines and Northwest Airlines.

**Foreign**—PCA's record domestic allocation of 12 was exceeded, however, by an allotment of 14 C-54A's to the Netherlands government. Four C-54B's went to A. B. Swedair.

The allocation, fifth by EPA and the predecessor Board, disposed of 48 surplus transports, including the 40 C-45's. Five DC-3 type planes, all C-52's, went one each to General Motors Corp., Eastern

## Norway Signs

Announcement of a five-year, bilateral agreement with Norway was to be made by the State Department over the weekend.

Geographical advantage will lie with the U. S. since, in effect, Norway will be an intermediate point on return transatlantic routes of U. S. flag carriers, while the U. S. most likely will be the western terminus for Norwegian lines.

Norway is to be the sole grantee American Airlines, Air France, Pan Am, TWA, successor to American Export Airlines.

Negotiations for a bilateral air transport agreement between the U. S. and Mexico began this week, said two permanent sources said. They were expected to require only a few days.

Airlines, Northwest, PCA and TWA. A sixth was allocated to Iberia Airline, Spain. Three Lockheed Lodestar C-60's went one each to TACA Airways, the News League of Miami, and Air Charter Supply Corp.

The current batch of ships brings to 296 the number of Douglas transports allocated from surplus to domestic and foreign applicants, said administration. The agency disclosed that additional allocations to foreign carriers are being considered and probably will be announced soon.

**Paris**—Bidding by RFFC whereby parity for the surplus C-54's will be declared, surplus directly from Army stock as needed.

In addition to the surplus allocation, it was learned that C-47's, cargo version of the DC-3, have been removed from allocation, and are available in surplus for general acquisition.

## Canada Link Soughe

Eastern Air Lines is seeking acceptance of its system to link Latin American gateways with either major U. S. and Canadian cities via one-continent integrated trans-Atlantic service.

EAL has requested certification by the Civil Aeronautics Board for a route from New York City to Montreal and Quebec, Canada, via Poughkeepsie-Kingston, Albany-Schenectady-Troy, and Lake Placid-Barre Lake, N. Y.; and Rutland, Montpelier-Berle, and Burlington, Vt.

## Jacksonville Case Closed

The Civil Aeronautics Board last week denied a petition of Eastern Air Lines for reorganization and reconsideration of the Board's decision granting National Airlines non-stop service between Jacksonville and Miami on AM 31. Significantly, the Board issued a supplemental opinion that reviewed the history and meaning of route authorizations and clarified their scope and description.

## Non-Stop Trend Pushed By Lines

Eight carriers take first step toward more extensive non-stop privileges: file consolidated applications.

First procedural step toward more extensive non-stop privileges is being taken by at least eight airlines through applications for route consolidations on file with the Civil Aeronautics Board. Proposing integration of existing routes into single new routes, are:

• **American Airlines**—AM 18, AM 33, AM 4.

• **Braniff Airways**—AM 9, AM 18, AM 34.

• **Continental Air Lines**—AM 43, AM 60 and AM 28, AM 43.

• **Eastern Air Lines**—AM 10, AM 43.

• **Northeast Airlines**—AM 27 (except foreign segments), AM 45, 18.

• **Northwest Airlines**—AM 3, AM 53.

• **Transcontinental & Western Air**—AM 56, AM 62 and AM 3, AM 37, AM 44, AM 61, AM 67.

• **United Air Lines**—AM 1, AM 32, AM 66.

Action on only one of these proposals has yet been taken. American's was the subject of a recent hearing conference. Petition to intervene in the case are EAL, Northeast, and TWA. Experts point out that granting of AAA's application would enable American to operate non-stop between Boston and points south of New York-Newark, connecting with a shorter, more direct, position over EAL for traffic between such points. Eastern's certificates for AM 3 and AM 4 require flights serving Boston to originate and terminate at points south of Richmond, Va., or west of Charleston, S. C.

Northeast alleges that granting American's consolidation would "prejudge" its own application for routes between Boston and Washington and New York-Newark and New Orleans. A "predetermined advantage" would accrue to AA, Northeast says, if American's proposed merger with Mid-Continent Airlines and extension of AM 32 from Nashville to New Orleans were approved prior to hearing in the Middle Atlantic case.

## 28-Passenger DC-3 Begins AA Service

Seating arrangement in the 28-passenger Douglas DC-3 which American Airlines placed in service Oct. 1, between New York and Boston on three daily round trips, was designed and built by AA engineers and overhaul personnel.

Cabin interior was lengthened by reduction in size of the forward compartment. In contrast with the usual 21-passenger DC-3, with a single row of seats on one side of the aisle and a double on the other, this plane has two double rows. Aisle and seats have been narrowed.

**Passenger "Cheers"**—Passengers take care of their own luggage, an interesting departure in view of a recent statement by C. R. Smith, chairman of American's board, that air travelers will have to carry their own baggage and buy meals if fares are to come down to 3 cents a mile. Baggage racks were to be served on the 28-passenger plane. A baggage compartment has been探出 back of the stewardess station for heavy luggage, and overhead racks are installed for hand luggage. The ship is being used on some regular and some new flights between the two points.

**Added Charge**—Objections by other airlines seeking permits for similar routes were that East-West transportation would not be shared equitably by the proposed American route, and that AA's proposal was attempting to establish a new transcontinental route.

## Great Lakes Hearing Spotlights AA Testimony

Testimony by Charles A. Klemm, American Airlines traffic vice-president, in the Great Lakes area route hearings, started last week at Indianapolis, brought out a host of controversial issues for attorneys for American and Transoceanic and Western Air.

Klemm's testimony was lengthened by reduction in size of the forward compartment. In contrast with the usual 21-passenger DC-3, with a single row of seats on one side of the aisle and a double on the other, this plane has two double rows. Aisle and seats have been narrowed.

**Passenger "Cheers"**—Passengers take care of their own luggage, an interesting departure in view of a recent statement by C. R. Smith, chairman of American's board, that air travelers will have to carry their own baggage and buy meals if fares are to come down to 3 cents a mile. Baggage racks were to be served on the 28-passenger plane. A baggage compartment has been探出 back of the stewardess station for heavy luggage, and overhead racks are installed for hand luggage. The ship is being used on some regular and some new flights between the two points.

**Regional Feeder Case Outlines CAB Concern**

The Civil Aeronautics Board, during oral argument in the Rocky Mountain area case last week appeared primarily concerned with whether the proposed route, east to the government main substation, and feasibility of serving small communities located closely together with the plane types proposed by most of the applicants.

First of the regional feeder line proceedings, this case comes under Klemm's recommendation for temporary certification of Ray Wilcox, Inc., of Denver, for two routes connecting Denver and Grand Junction, Colo., via intermediate points and a long route between Salt Lake City and Albuquerque. Southwest Airlines, Inc., of Laramie, Wyo., for a route from Billings, Mont., to Cheyenne, Wyo., with an additional loop to serve four communities in western Wyoming, and several addititons to the Western-Idaho system (AVIATION NEWS, June 4).

Planes have been made for purchase of 3,990 acres about eight miles south of the center of Baltimore for an airport.

# "NEW" Hi-shear RIVETS



## FOR COMPETITIVE PRODUCTION

### YOU SAVE TIME—COST—WEIGHT AND SPACE

The "Hi-shear"® Rivet, used in Midwest Airlines' commercial route since 1942, has the compact head and the flat shank of a high-tension metal screw, but with the mechanical advantages of a rivet. Compare the use of "Hi-shear"® for production problems requiring quick finishing with greater strength.

### ADVANTAGES

- Maximum Strength—Set & "Hi-shear"® in one hit.
- No threads or binding—No washers—No objectionable failure.
- Strength Comparison—One "Hi-shear"® equals 25-32 screws.
- Corrosion resistance.
- "Hi-shear"® design means smaller fittings—lighter weight—less weight.

Write for our new Manual detailing the "Hi-shear"® Rivet.

Dept. D  
Standard Rivets Co. Inc.

THE STANDARD RIVET CO. INC.

1259 Sepulveda Boulevard  
Marina Beach, Calif.

Yes, it's true...and  
there's a good reason why

EVERYWHERE YOU LOOK  
YOU SEE

**Sensenich**  
  
**Propellers**

**RIGHT ON THE NOSE  
OF SHIP AFTER SHIP**

[Powered under 250 HP]

You, too, can swing a  
**SENSENIICH**

Write for free info.

**SENSENIICH BROTHERS**  
Advised by Standard Motorized Aircraft,  
Manufacturers of Propellers  
West Coast Distributor, Standard Corp.



\*For more than a quarter century, Mercury has been building aircraft and aircraft accessories...acquiring a broad experience and consequent "know how", invaluable in today's crisis



**New Route Recommendations:** Civil Aeronautics Board examiners have recommended E. W. Wiggin Aerostar, Inc., for a system of feeder routes in northern New England, Northeast Airlines for a Burlington-Portland route, and Colonial Airlines for certain extensions of AM 72 or indicated by the above map. In the first two instances, temporary three-year certification is suggested. Gless Falls, N. Y., therefore, served only seasonally by Colonial would have such restriction removed.

## Helicopter Services Gain CAB Attention

Examiners' report in New England case indicates favorable consideration when craft are available for commercial use.

A report by two Civil Aeronautics Board examiners in the New England case generally suggests that proposals for experimental air service by helicopter will receive favorable attention when direct-lift aircraft become available for commercial use.

On the grounds that this availability will not occur "within a

reasonable time," Examiners Barron Fredricks and Joseph Fitzsimmons recommended denial of current proposals by four applicants for this type of service. Significantly, however, they found it pertinent to summarize evidence by one of the applicants showing need for helicopter service in the area and inherent advantages of direct-lift aircraft.

**Delta Air Appeals.** The examiners recommended E. W. Wiggin Aerostar, Inc., of New Haven, Mass., for two temporary certifications for nine direct-lift routes in Southern New England. Colonial Airlines for permanent extensions of AM 72 and Northeast Airlines for a route from Burlington, Vt., to Portland, Maine, via intermediate points, on a three-year trial basis.

The four helicopter applicants are Skyway Corp., Air Transporter Inc., Pittsburgh & Locomotives Airlines, Inc., and Mex-Dex. Besides summarizing Skyway's case, the examiners cited the lead-feeder-pickup option, in which CAB said it "will look with favor" on helicopter proposals when the machines become commercially available.

The examiners wrote: "The direct-lift aircraft appears to be the

best fine airplane competitor with intermediate and short-haul passenger services. However, it is not yet ready to compete with the established airline services in New England, and may not be for some time to come."

**MAIL PRODUCTS**, RICH RD, MURFREESBORO, TENN.

Sample standard products of personal aircraft aviation service include airplane supplies with built flying and maintenance during emergency. Address in New York.

209-211 AVIATION NEWS  
100 West 45th Street, New York 18, N. Y.

AVIATION NEWS • October 8, 1945

means of providing two classes of substantially improved transportation service that cannot be offered by fixed-wing aircraft" — between civic centers of communities and the port, and between state center and airport.

**Delta.** Chairman Fitzsimons of temporary route grants to Wiggin, not presently granted by CAB, and Northeast, called for periodic reports that would give the board further data on need, cost and traffic-diverting effect of feeder service in the area. The examiners advised denial of applications by Eastern Air Lines, All American Aviators, and a group of prospective scheduled operators.

## SHORTLINES

\* \* \* \* \*

**Air Transport Command** has merged its North Atlantic, Caribbean and South Atlantic Divisions into a single Atlantic Division. Headquarters will be at Fort Totten, N. Y. Maj. Gen. Lawrence H. Miller is division commanding general.

All American Aviation's recent addition of a new trip to the eastbound route between Pittsburgh and Philadelphia via Harrisburg and 26 intermediate points, brings service to four flights daily on all major routes and increases its scheduled operations to 3,678 miles daily.

**Midwest Airlines.** The Civil Aeronautics Board sees 22 Mexican government, financial and industrial leaders from Mexico City in Chicago on special planes late last month to attend a Mexican-American conference on industrial research.

**Delta Air Appeals.** The examiners recommended E. W. Wiggin Aerostar, Inc., of New Haven, Mass., for two temporary certifications for nine direct-lift routes in Southern New England. Colonial Airlines for permanent extensions of AM 72 and Northeast Airlines for a route from Burlington, Vt., to Portland, Maine, via intermediate points, on a three-year trial basis.

The four helicopter applicants are Skyway Corp., Air Transporter Inc., Pittsburgh & Locomotives Airlines, Inc., and Mex-Dex. Besides summarizing Skyway's case, the examiners cited the lead-feeder-pickup option, in which CAB said it "will look with favor" on helicopter proposals when the machines become commercially available.

The examiners wrote: "The direct-lift aircraft appears to be the

means of providing two classes of substantially improved transportation service that cannot be offered by fixed-wing aircraft" — between civic centers of communities and the port, and between state center and airport.

**Pan American Airways** made its plane check of its North Atlantic route in six days. The stop was on the Grand Banks off Europe to cover the 4,830-mile trip, returning via Lisbon, the Azores and Bermuda. . . . The company's life raft shop at Miami tests, repairs and replaces about 2,000 valuable rubber rafts for its own use and that of the Army.

**TWA** has received the first commercial airplane released to private charter since the end of the war. A TWA-operated DC-3 took off from Washington last week to carry newswires as a 20-day, 7,250-mile coast-to-coast flight. The aircraft, named "Washingtonian," under special dispensation, was adopted by the National Association of Manufacturers.

**DC-4's** have been acquired and would be converted by Douglas to transport aircraft. It is to be done by year's end. The new will be two-stage engines instead of one on each plane plus.

**Pan American Airways** made its plane check of its North Atlantic route in six days. The stop was on the Grand Banks off Europe to cover the 4,830-mile trip, returning via Lisbon, the Azores and Bermuda. . . . The company's life raft shop at Miami tests, repairs and replaces about 2,000 valuable rubber rafts for its own use and that of the Army.

**TWA** has received the first commercial airplane released to private charter since the end of the war. A TWA-operated DC-3 took off from Washington last week to carry newswires as a 20-day, 7,250-mile coast-to-coast flight. The aircraft, named "Washingtonian," under special dispensation, was adopted by the National Association of Manufacturers.

## CAB SCHEDULE

\* \* \* \* \*

**Oct. 8.** Exchange of exhibits in Mohawk Valley case. Presented from Del. 1

**Oct. 9.** Final argument in Eastern Intergovernmental agreement case. Presented from Del. 1

**Oct. 10.** Route due in Pacific case. Presented from Del. 1

**Oct. 11.** Final argument in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1

**Oct. 12.** Exchange of exhibits in New York City-Pittsburgh case. Presented from Del. 1 (Sherman 2)

**Oct. 13.** Hearings due to commence part in New England case.

**Oct. 14.** Route due in Intercity case. Presented from Del. 1 (Sherman 2)

**Oct. 15.** Route due in South Atlantic route case. Presented from Del. 1

**Oct. 21.** Oral argument in West Coast case. Presented from Del. 1 (Sherman 2)

**Oct. 22.** Oral argument in Midwest case. Presented from Del. 1 (Sherman 2)

**Oct. 23.** Hearings due to commence in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Oct. 24.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Oct. 25.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Oct. 26.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Oct. 27.** Route due in New England case. Presented from Del. 1

**Oct. 28.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Oct. 29.** Route due in New England case. Presented from Del. 1

**Oct. 30.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Oct. 31.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 1.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 2.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 3.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 4.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 5.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 6.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 7.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 8.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 9.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 10.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 11.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 12.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 13.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 14.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 15.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 16.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 17.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 18.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 19.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 20.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 21.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 22.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 23.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 24.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 25.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 26.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 27.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 28.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 29.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Nov. 30.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 1.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 2.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 3.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 4.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 5.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 6.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 7.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 8.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 9.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 10.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 11.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 12.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 13.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 14.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 15.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 16.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 17.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 18.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 19.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 20.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 21.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 22.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 23.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 24.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 25.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 26.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 27.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 28.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 29.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 30.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Dec. 31.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 1.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 2.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 3.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 4.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 5.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 6.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 7.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 8.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 9.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 10.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 11.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 12.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 13.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 14.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 15.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 16.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 17.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 18.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 19.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 20.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 21.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 22.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 23.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 24.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 25.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 26.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 27.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 28.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 29.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 30.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Jan. 31.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 1.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 2.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 3.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 4.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 5.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 6.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 7.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 8.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 9.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 10.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 11.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 12.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 13.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 14.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 15.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 16.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 17.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 18.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 19.** Exchange of exhibits in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb. 20.** Route due in Northeast Airlines-Hawaiian Islands trans-Pacific route case. Presented from Del. 1 (Sherman 2)

**Feb.**

## EDITORIAL

### Keeping An Expansible Industry

In 1939 THE AIRCRAFT INDUSTRY produced 2,141 planes and employed 45,000 persons. In 1944 the output peak was 93,000 aircraft with 1,300,000 workers. The present outlook for 1946 is reminiscent of 1939—34,000 warplanes, including experimental types, or about 20% of our top production.

The service contract cutting schedules in the face of Congressional ceiling that Congress must answer these questions, and soon. Are we the world's most powerful and influential nation to maintain our ability to keep pace in the world and to defend ourselves? If so, can we afford to maintain an adequate, proved air force at all times and not to keep our aircraft industry at all times expandable to whatever proportion is emergency requires? If we decide to keep our leadership we must decide also that we must pay for it. Bargain rates seldom pay out quickly.

At the moment we are slipping back to 1939 production levels. We have the plants but the executive and engineering brains are scattering rapidly to other industries. Machine tool improvements will keep ahead of production demands will be impossible on the scale necessary if this equipment and manpower is abandoned. The disintegration of the greater development and production systems we will have even more is still underway.

The world's greatest air power now have 2,000 new aircraft by the end of next year, most of them experimental. Few of these fully proved either in flight or production because maximum efficiency comes only from experience. Of course, there are numberless thousands of obsolescent bombers and fighters of World War II if we are determined to pour millions of dollars into maintaining an obsolete force instead of keeping our leadership.

Will the 1944 schedules give us the nucleus of a rapid expansion? We can't see it. On the other hand the only alternative of a two or three year period of putting ourselves together is unthinkable. If attacked, we won't remain above a fraction of that time.

Comments made at the first 1945 aircraft meeting in Washington also show that these aircraft represent a far more complicated and difficult problem for the industry than a mere backlog of 100%. Gone are the economies of mass production. Much is the intensive specialization of labor. Small gains this season a return to pre-war hand-made methods with their accompanying demands in time and cost. The atomic bomb taught more than the lesson of intensive research. Under tremendous difficulties we produced a revolutionary weapon by sheer mass of brains and brawn and money. It was money and quality man-hours which gave us the know-how. There is a lesson in this for Capitol Hill if it wants serial leadership for the United States.

The Rock Rogers era of justification warfare is surely coming, maybe in five years. Until we find it—and we must find it before anyone else—we must have the world's best air force and a talented, healthy aircraft industry which can be expanded quickly to produce aerial weapons of whatever kinds emerge from the laboratories.

ROBERT M. WOOD

### Mobilizing The Operators

REALIZING THE IMPORTANCE of economic and safety regulations which have been proposed for non-scheduled aviation, the Pennsylvania Aeronautics Commission called a special meeting of operators in Harrisburg a few days ago. Nearly 35 attended. CAB sent two representatives from Washington, CAB sent four, including its economic consultant and one of the examiners who wrote the report on suggested economic controls. The discussion was enlightening to both operators and the Washington group.

Many of the operators had not even read the suggested regulations which would mean so much to their business. Those who were informed on the proposals revised a few of their ideas. Several of the Washington delegation realized for the first time why operators fear some of the suggestions. As has been repeated consistently on this page, the CAB speech did not come to them as if the aircraft industry could talk, and in holding out hope of non-protection or changes on those points the non-scheduled safety feels are discriminatory or unnecessary at this time. But first, CAB must know exactly what this industry is agreed upon, and why. Some progress toward this objective is developing.

United Pilots & Mechanics Association has dispatched a summary of the regulations to all individuals who received gasoline allocations and to every civilian airport in the country, requesting that every interested person send comments to UPMA or the Boeing UPMA will appear at the oral argument. "If you are opposed to the regulation you should say so," the Association said. "If you are in by and do nothing you should not complain later if the regulation proves burdensome or causes you to lose money."

The Aeronautical Training Society is polling its members on a decision to submit a brief at the oral argument. So far the vote is unanimously yes.

The New England Aviation Trades Association expects to have its members' attitude crystallized by the end of October.

The Pennsylvania Aviation Trades Association meeting last week, illustrating session with CAA and CAB spokesmen, passed resolutions against any unneeded regulations on non-scheduled aviation, safety or economy, for a period of three to five years during which the subject should be studied.

In Washington, a date for the oral argument on the examiners' recommendations for economic regulation is to be set for Nov. 25. The deadline for comments on safety regulations proposed for Part 45 is to be set back from Oct. 1 to probably a date in January. Comments on Part 42 are still being welcomed.

As far as can be learned, the Pennsylvania Aeronautics Commission is the first state government agency to call a special meeting on the subject. For that enterprise it, and its operators who attended, are to be commended. Other forums should be scheduled throughout the country. Dates and locations of such meetings should be sent at once to the CAB and CAA, who will endeavor to send official representatives to speak to the operators.



*Almost every American  
benefits every day  
from the products of  
**BORG-WARNER***

*GEARING FOR PEACE as painted by James Sennett at Worrell Gear in Muncie, Indiana. From the inscription of the first "gearless carplane," this great Borg-Warner plant has consistently been the leader in the mass production of gear assemblies for the automotive industry. During the war, it also was one of the largest producers of transmissions for all types of motorized military vehicles.*

The Warner Gear Division, although the world's largest independent producer of transmissions, is only one of three great Borg-Warner units making gear assemblies.

There are many fields in which Borg-Warner products benefit almost every American every day. In fact, Borg-Warner products are found on 9 out of 10 farms, in

9 out of 10 airplanes as well as in 9 out of 10 makes of automobiles. And Norge refrigerators, ranges and washing machines make the homes of millions more efficient and hygienic.

All of which illustrates how Borg-Warner's principle, "Design it better, make it better" works in many ways to bring you ever better products at lower lower costs.

**Partners with the Aviation industry from the start, Borg-Warner parts today are serving in 8 out of 10 airplanes.**

**INDUSTRIAL, VEHICLE AND AIRPLANE MOTORS • AUTOMOTIVE AND TRUCK PARTS  
TRANSFORMERS • POWER UNITS • MOTOR DRIVES  
AIR COMPRESSORS, CYLINDERS • AIR COMPRESSOR DRIVES  
POWER UNITS • AIR COMPRESSOR DRIVES  
HYDRAULIC SYSTEMS**

**BORG-WARNER**



## Timken Bearings Equip New A. A. F. HELICOPTER

Twenty Timken "Aircraft" Bearings equip the new Kellett XR-8 Helicopter—made for the U. S. Army Air Forces—at twenty vital points of its main drive and wheels.

Part of a series developed to meet the need of aircraft engineers for an anti-friction bearing with lighter weight and compact design, Timken "Aircraft" Bearings also assure maximum radial and thrust load-carrying capacity . . . smoothness of operation . . . economical maintenance . . . and ease of operation . . . as well as power conservation and endurance.

If the many matchless qualities of Timken Bearing design for aircraft applications can help, consult us. We'll be glad to make recommendations. The Timken Roller Bearing Company, Canton 6, Ohio.



*The "TIMKEN" Trade-mark is a good thing to look for . . . a protection to find.*